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FIGURE 1033

MSSVAVLQTQESFAEHRSGLVPPQIKVATLNSEESDPPTYKDAFPPLPEKAACLESQAQEPAGAWGNKIRPIKASV
ITQVHVPLEERKYKDMNQFGEGEQAKICLEIMQRTGAHLESLAKDQGLSIMVSGKLDVAMKARKDIVARLQTO
ASATVAIPKEHHRFVIGKNGEKLQDLELKTATKIQIPRPDDPSNQIKITGTKEGIEKARHEVLLISAQDQKRAVE
RLEVEKAFHPFIAGPYNRLVGEIMQETGTRINIPPPSVNRTEIVFTGEKEQLAQAVARIKKIYEKKKKTTTIAV
EVKKSQHKYVIGPKGNSLQEIILERTGVSVIIPPSSDSISSETVILRGEPEKLQALTEVYAKANSFTVSSVAAPSWL
HRFIIIGKKGNLAKITQMPKVHIEFTGEDKITLEGPTEDVNVAQEQIEGMVKDLINRMDYVEINIDHKFHRHL
IGKSGANINRIKDQYKVSVRIPDPSEKSNLIRIEGDPQGVQQAERELLEASRMENERTKDIIIEQRFHRTIIGQ
KGERIREIRDKFPEVIINFPDPAQKSDIVQLRGPKNEVEKCTKYMOKMVADLVENSYSISVPIFKQFHKNIIGKG
GANIKKIREESNTKIDLPAENSNSSETIITGKRANCEAARSRLSIQKDLANIAEVEVSIAPAKLHNSLIGTKGRL
IRSIMEECGGVHIHFPVEGSGSDTVVIRCPSSDVEKAKKQLLHLAEKQTKSFTVDIRAKPEYHKFLIGKGGKI
RKVRDSTGARVIFPAEDKDQDLITIIIGKEDAVREAQKELEALIQNLNDNVEDSMLVDPKHHHRFVIRRGQVLR
IAEYGVVMSFPRSGTQSDKVTLGAKDCVEAAKKRIQEIIEDLEAQVTLECAIPQKPHRSVMGPKGSRISQIT
RDFSVOIKFPDREENAVHSTEPVVQENGDEAGEGREAKDCDPGSPRRCDIIISGRKEKCEAAKEALEALVPVTI
EVEVPFDLHRYVIGQKSGIRKMMDEFVNIHVPAPELQSDIIAITGLAANLDRAKAGLLERVKLEQAEQEDRAL
RSFKLSVTVDPKYHPKIIIGRKGAVITQIRLEHDVNIQFPDKDDGNQPDQITITGYEKNTEAARDAILRIVGELE
QMVSEDVPLDHRVHARIIGARGKAIRKIMDEFKVDIRFPQSGAPDNCVTVTGLPENVEEAIDHILNLEEEYLAD
VVDSEALQVYMKPPAHEEAKAPSRGFVVRDAPWTASSSEKAPDMSSSEFFPSFGAQVAPKTLFPWGPKR

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FIGURE 1034

CCCAGCTCGGTGCTGCCGCCATCTTCTTGGAGGACAGGAGGAGGCGAAGGCTCCCCCTCCCCGTGATCGCTCC
GCATCCCCGCCACCACCTGCCCCGCCGCCGCCCTCTCTCCTCCTCAGTGGGCGATTTGTCTCCTTATAACAAAC
GGCCTTCCCCCCTCCAGTTACCCACCGCAAGGCGAAGATTCTATTACCTGTTCCACTCTTTAAGCATAGA
AAACCGAGCTCATAGACGAAGCTTCACAAAAGTGTCTAAGCAACAGCCAACTCAGTTTATAAATCCAGAAACA
CCTGGCTATGTTGGATTTCGAACCTCCCCAATCAAGTTCACCGAAAATCAGTGAAGAAAGGTTTGGATTACACA
CTGATGGTGGTCCGCTGAATCAGGCTAGGAAATCGACTCTCATAAACAGCCTATTCTTAATCCTGATCTGTAACCA
GAAAGAGTCATACCTGGAGCAGCAGAAAAAATTGAAAGAACTGTCCAGATTGAGGCTTCAACTGTGAAATTGAA
GAGCGAGGGGTCAAGCTACCGCTGACAGTGGTAGATACCCCTGGCTATGGTGACGCTATCAACTGCAGAGATTGT
TTTAAAGCAAAATTATCTCTATATTGATGAGCAATTGAGAGGTACCTGCATACGAGAGCGGCTTGAACAGGCGG
CACATCATTGATAATAGGTTGCATTGTTGCTTTTACTTTTATTTACCTTTTGGACATGGACTTAAGCCCTTAGAT
GTGGCGTTTATGAAGGCAATACACAAAGGTGAATATTGCGCTGTCAATTGCAAAAGCTGACATCTCACCCGT
AAGGAACGGGAGCGGCTGAAGAAAGGATTCTGGATGAAATTAAGAAACATAACATCAAAATCTATCACTTACCT
GATGCAGAAATCAGATGAAGATGAAGATTTTAAGAGCAGACTAGACTTCTCAAGGCTAGCATCCCTTCTCTGTG
GTTGGATCCAATCAGTTGATTGAAGCCAAAGGAAGGTGAGAGCGCCCTCTACCCCTGGGGTGTGTTGGAA
GTGGAGAACCCAGCAGCAATGACTTCTGAAGCTGAGAACCATGCTCATACCCACATGCAGAGTATCCAGGAG
GTGACCCAGGACCTTCATTATGAAGTCTCCGTTCTGAGAGACTCAAGAGGCGGCGAGAAAGTGGAGAAATGAG
GACATGAATAAAGACCAGATCTTGCTGGAAGAAAGTGAAGTCCCGCCGATGCAAGAGATTGCAAGGATG
CAGGCGCAGATGCAGATGCAGATGCAGGCGGGGATGGCGATGGCGGGGCTCTCGGGCACCAGTGTGAAGGTGAT
GTGCACATATCAAGAAAGTCAAGAAAAACCTTTCCCTGGATAAAAAAGAAACATTCAGATGCATGATCCAGCTG
TGTGTTTCAATCTCTGGGAGGGTGCCATCCACATTTTAAACAGTACCTGTGCGTGAGAAATTTAATTTTTAAAGA
CTTTGATGTTCTTTTGTATGAAGTACTTTTAAAGTATGTATTTCAATGCTGTGTCACACTCTGCTTTTGTGAGG
TGAATGTCTTCTTTTCTTTCTCCCTAACCCACTAATGTTAGAATTGATTTCAAGAAATCGGCATGTATACTTAAT
ACTGAATTTCTTTGATTAACTGACTTAACAACTGACTAACCATTGATGAGCATCTCTGATTTTTATCTAGAACA
TTCAGATTTACCATAATGTTCTTAGTGAGAGGTGTGCGCTAGTGATGAGAAGATACACTGACTTGGTGC
AAGGCCATCTGCTTACCACATCACACCCTGGAGATCTTGCTTCTTGTCTTTATGTTTGTACACAAACCTTA
AAACCAAGTTTGGCTGCTATAATCTATACTGTTGATTCTGCTGCTGTTATCTGTTAACCAAAATAAACATAAT
AGAAATTTCTTAATGAGATATATCTTTTATCTTAAACAGCTTTTATAGAGTGAGTTTAAAGAAAGTCTCTTAAT
CTGATGCTAGGTTGTTTTTAAACCACTATGCAAGAACTCACCACAAGCCACCTTTTGTAGTGTTCTCCACTTA
TACTGTTTATCTCTGTGCTACAGAGAAAAATCAAGCAGTCATAAGCTCCAGTTTTCGCTATTGCAAAATAAGACT
TACCTACAAAAATGAGATTCCAGTGAACATAATTTGGTTTTTACTCAACCAAAATTAAGAAATTTTTTAAAGAAAAAT
AGCAGTTGGTCTATTGAGAAATCAAACTTTTTATATTTTATCTGCATTTTGTGTTTCTGCTGCTAGGTTAGG
ATAGAAGATCTGCTCCCTGCTGGAATTTGGGGCTGTGTTGGTGGCTTGCCCTGAGAGCTTGGCTGGGTGAA
AGTGTTCGCCGCCATAGGCGCTTGGTGGCTGAACTCTGATGCTTACCGGGTCTCCTGATTGAGTTTCCCTTTA
AATACTCCCTTTTGTGATATTTTCTGATGGGAGGAAAGTAGCAGTCACTCTTTTTTGTGTGAGGCGTGTCTCA
TTTTTTTTAGCCATTGCTGTTTCACTTATTGTTGTAATAATAAACCGTGTGCTATGTCAGAAAGTGAAGACATTT
CAAACTGTAGCATAGGCTAGTGGGAGGTCGCGACAGTCGAAGCCACACCTGGTCTGTTTTCTGTGCACTGTAG
CCTTAGTGTCACTTCTTCTTGTGTCTCCTTATGTTACACTCCAGCGGTTGCCCTTTTATCATTTTCTACTGAA
GTTGGGAAATTAACCCAGAAATTGACAGATGAAAGGAGACAAATGTTGTGTAGGAGATGGAGAAAAATGCTTA
ATCTGAGATGAGACAGGGTTTTTTCATTTTTTGTGGGGCTAGAAAAACATAAAATAGAGGCATTAATAATAA
TAGTTAATGAAGGTGTGCTACAGAAAAATATCTGTTGTTCTTGTAACTTTGCCCTTCACTGTGCTTAATTGTG
AACAGCCAAAAGCTATATGTTATGGCTTATTGTGTAAGGTAACATAAGAAAGTGGTGTCCATGACTTCAGAGTAC
ATCCATGCGGAGTCCATTTTTGTAGTTTGACATTTAATAACTTTGCTGGAATAATCTGTAAGAAAAAGAAAAAGT
TTGCTAGTGATCAAGCCCGCATATGTGAGTGAAGAACTTCTAGGCAAGCTGCTGCTGCTGCTGCTGCTGCTGCTG
GAGGGAGGCCACCTGCTCACTCTGATGCCCTTTGTTTTACTACCAAACTTAATAGATAGTCTTTGATA
ATAGATAACTGCTCTTTTACTAAGACATAGTCTCTACCTATAGAAATGATTTTTGAAAAACACTTATTTTACACAG
CAATTTTGTATGCTATTAAACTAACCTTTTATCAATAAAGCAGCTATTGTTTAGATATT

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FIGURE 1035

MSKQOPTQFINPETPGYVGFANLPNQVHRKSVKKGFEFTLMVVGESGLKSTLINSFLTDLYPERVIPGAAEKI
ERTVQIEASTVEIEERGVLRLTVVDTPGYGDAINCRDCFRTIISYIDEQFERYLHDESGLNRRHIIDNRVHCCF
YFISPFHGLKPLDVAFMKAIHNKVNIVPVIAKADTLTKERERLKKRILDEIEHNKIYHLPDASEDEDEDFK
EQTRLKASIPFSVVGSNQLIEAKKKVRGRLYPWGVVEVENPEHNDFLKLRTMLITHMQDLQEVTDLHYENFR
SERLKRGGKRVENEDMNKDQILEKEAELRRMQEMIARMQAMQMOMQGGDGDGGALGHHV

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FIGURE 1036

CACCGAGCGCCCTGGTGTCCCTCGCAGTGGACTGACGCCGAGGGGCGAGCTAGCCGGCTCCGCGCCTCTCCGC
GGGATCCAGACGCCCTCTGGGGCTGCTGCGGGAGGGTCTGAGGCGGGCGCGCCATGGCTCACTCCGGGGATTG
CCAACCAGCACTCTCGAGTGGACCTGAGGAGCTCTTACCAAGCTCGACCGCATTTGGCAAGGGCTCGTTTGGGG
AGGTCTACAAGGGCATCGATAACCACACAAAGGAGGTGGTGGCCATCAAGATCATCGACCTGGAGGAGGCCGAGG
ATGAGATCGAGGACATCCAGCAGGAGATCACTGTCTCAGTCAGTGGCAGAGCCCCATACATCACCCGCTACTTTG
GCTCTTACCTAAAGAGCACCAAGCTATGGATCATATGGAGTACCTGGGCGGGCGCTCAGCACTGGACTTGCTTA
AACCAGGTCCCCTGGAGGAGACATACATTGCCAGATCCTCGGGGAGATTCTGAAGGGCTGGATTATCTGCACT
CCGAACGCAAGATCCACCAGACATCAAGCTGCCAACGTGTACTCTCGGAGCAGGGTGCAGTGAAGCTGGCGG
ACITTTGGGGTAGCAGGGCAGCTCACAGACACGCAGATTAAAGAGGAACACATTCTGGGACCCCCCTTCTGGATGG
CACCTGAGGTGATCAAGCAGTCGGCTTACGACTTCAAGGCTGACATCTGGTCCCTGGGGATCACAGCCATCGAGC
TGGCCAAAGGGGAGCCTCCAACTCTGACCTCCACCCCATGCGCGTCTGTTCCTGATTTCCCAAGAACAGCCAC
CCACACTGGAGGGCCAGCACAGCAAGCCCTTCAAGGAGTTCGTGGAGGCTGCCTCAACAAAGACCCCGATTCC
GGCCCACGGCCAAGGAGCTCCTGAAGCACAAAGTTCATCACACGCTACACCAAGAAGACCTCCTTCTCACGGAGC
TCATCGACCGCTATAAGCGCTGGAAGTCAGAGGGGCATGGCGAGGAGTCCAGCTCTGAGGACTCTGACATTGATG
GCGAGGCGGAGGACGGGGAGCAGGGCCCCATCTGGACGTTCCCCCTACCATCCGGCCGAGTCCACACAGCAAGC
TTCACAAGGGGACGGCCCTGCACAGTTTACAGAAAGCCTGCGGAGCCCGTCAAGAGGCGAGCCGAGGTCCAGTGCC
TGTCACGCTGGTCCGGCCGTCTTCGGAGAGCTCAAAAGAGAAGCACAAAGCAGAGCGGGCGGAGCGTGGGTGCGC
TGGAGGAGCTGGAGAAGCCCTTCAGCCTGGCCGAGGAGTCTGCCCGGCATCTCAGACAAGCTGATGGTGACC
TGGTGGAGCGAGTGCAGAGGTTTTACACAACAGAAACCACCTGACATCCACCCGCTGAAGCGCACTGCTGTTTCA
GATAGGGGACGGAAGGTGCTTTGTTTTTGTCTTGAGCTCCATAAGAAGTGTGCTGACTTGGAAAGGTGCCCTGTGC
IATGTCGTGCTGAGGGACAGCTCGGATCCCGTGGGCTTACATGCCAGGTCAACAGGTACCCGTCTCCTTCCA
CCCCTCAGTGTGCTGTGTGACAGTCAGGGACGCTGTCTCTATGCCCATGCCCCCTCCTCCCTCTCCTTGCCCA
GCAGTATTGCTCACGGGGGCTCCAGCCGCCGGCGTGGCCCTCATGAGCTACGCCCTGGGTCTTCTGCAGACTCATG
CAGCCCTATGGCCGCTCAGACCAAGGCGCAGAGCAACTATCAGGGCAGCTCTGCCCTCCTCCTCCCATGAGGTGGG
GAGAGGCAACAGGGCAGCCCCAGAGGAGTGTCTTGCCCGCTGTCTCCCGGGGCCATGATGGCCATAGATTG
CCTTGTGGTGTGGATCAGGTACTGTGTCATTAAGTACTTGTGTCATCCAGAAATGTTTTGTTTTTAAGAA
AATTGAATTACTTGTTCCTGA

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FIGURE 1037

GGCACGAGGCCAATCCCATGCCTGGGGGAGAGACAGCGGCTCAGGAGTGGGGGAGCACGGGCTTCTACACCACA
TGGGAAGGCTCTGGCATGAGGTTTTCCTTTGGGAAGGTTGTTTGGGCCCTGAAAGTTCATCTCCGAGAGTGGTG
TGCAGGGCAGGCCAGGGCCCATGCTGGCTGCACTTTGTGGCTGCCCTGGGCCAGCCTGTTTGGGAGCTGG
GACTGTGGGCTCGCTTTTCGTACCTGGGCTCAGGTGCGGTGTGGCCACCGCCACCTCATCCCTGCCCTGGGAG
GCTCTCCAGGGGCTGATGGGGGGGTCTGTGAGGGAGAATCAGGGCTCGGGAAGCCACGCTGGGAAGGCAGGA
CACAGGACACAGCAGCTTCTTTGGAATCTCCAGGTGAGGATTACATCCCAAAATAAAATTCAGAAGCCAGG
TGGCCTGTGCTCCCATGGGTGACCTCTGGAGGCAGTGGACCAAGATGCAGCAAGGAGAGGATGCAGAACAGCTT
CTTGCAAGCACCTGCTCCGGCATCCAGCGCTGCCCTGGAGGCAGGAAGGAGAGGCAGGGCAGGACCGCTGGCT
TGAGATGAGGGGAGCCCCATGGGCCCCAGGCAGGCTAGAGGAGGCACAGGCCCTGCCACGGCCACTCAGGTCA
GCCAGCCTGAGGCTGTGGCCTCCAAAGGGTCTGGGCGCACCCCCAGGTCGCAGGTGCTGAGGCCAGCCAACT
GCAGAGCACTCGCGCGTGGGTGGGCTGAGTGGAGGTGCCCTGGGAGCTGCCTAAATTCAGAAGCCTCCACTGCCA
TGGAGACTGCCGTGGCTGTCTCTCAGCCAGGTGCCGTGTGGCCTTGGCTAGGACCCAGAGCCACTGCAGC
CTCCGCCGACTCCCTCCTTCCGGGCTGCTCTAGTGAGGAGTGCCTAAGCCAGGACCCAGAACTCAGAGTTGAT
GGTGAGAGGAGGCCGCTGAGTCAGGACACCTGGCTTCTTGAAAGTTTCGCTCTGCCAGAAACCACTAGGGACC
ACGTTAGCTGCCTTCCTTGAGCTCCCCAGGAGTGGGTTCCACATCTGTGAGGTGGAGGGCTGGTGTGGAGGTGC
TCATGGGGTGCGGTGCTTGGGAGACAGCCAGGCCAGGGTGGCTGCTGCTTCCGTGTAAGTGGGGGAGGTGAGAC
AGATCTGGAAGGCGCTCTCCCTCAGATGGTTTCAATTAATGCTTTATACTGCCAGTCTGGGGGCTTGTTTGGT
TTGGGGGACGCAATCCACACAGAAAGGGGGAGCTCCTTCCGCTGCGGCTCCAGATAGATGGGGATGCCGGCT
CCAGGCCAGCAGCACTTGGGATCTGATGGGACACGGCCAGTGCCTAGGGGTGCCAAGTCCAAAGGCCCTCCCACTG
GGAGTCATCGCTGAGAAGATGCCAATGTTTCAATCCACCGGCTGCACAGGCACAACTCCCCACCCAGGACGGCT
GTGATGAGTGGCCCTCCCTGTCAACCTGGTCCCTGGAGTCCCCAGCACTGGGGCCCTGGTGGGGCTGATGTC
ACAGGTGTTTACTGTGCTGCTGCACTGGTCTATGCCAGCCTCACCCATGTGGGGACACCGGAAGGCACACTCCC
TTACCCCCGGTGGCGGCGGTGCGGTCCCCAGACGGACAGCAGCTGTGGCGACCTGCGTTTCTCCCTGGGCGCTG
TGCTTCCTCTAGTGTAGTCCGTCCTCGTTCCCTGTGGCTCAGAGGCCGCGTCCCTGGCTGTACATATGTGAT
TGCTGTGGGCACCCACAGACCCATGTCATAGCTGCCGTCCCGACGCTCAGCAGCGCTGTCGGATGTCTACAC
CCGAGTGTAGCCCTAGGCTCCTGTACTGTGCTGCCTTGAGGCTCTGTCCAAATTAAGAAATAAATGTGGCTCT
TACTCAACACAAAAA

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FIGURE 1038

MRWPSLSTLVPGVPSIWGPGGADVITGVYCAALVLCQPHPCGDHGRHTPLPPVPGRAVPQTDSSCGDLRFSLGLC
FL

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FIGURE 1039

ATGGAGGAACGGCGGGCTCCGAGCGCGCCCCGGAGTCCGCGAAACTTCCGAGCGGGCGCCCCCTGAAGGACCTG
ACCCGCTTCGTGGATTTCACATCAAAGGGCGCGACGTGATCGTGTTCCCTCCACATCCAGAAGACGGGGGGCACC
ACTTTCGGCCGGCACCTGGTGAAGAACATCCGGCTGGAGCAGCCTTGTAAGCTGCAAAGCGGGTCAGAAGAAGTGC
ACCTGCCACCGGCTTGGCAAGAAGGAGACGTGGCTCTTCTCCCGCTTCTCCACCGGCTGGAAGCTGCGGGCTGCAC
GCCGACTGGACGGAGCTCACCAACTGCGTGCCGGCCATCATGGAGAAGAAGGACTGTCCCGCAACCACAGCCAC
ACCAGTCTGACCCAGAGCGACCCCGCGCTCCCTGCCCTGCCGATGGTTTCTTGGCGCTTTCAGCGGTTGGCGC
CGTGGCTTTGGGAGGGATGA

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FIGURE 1040

ATGCTAACTAGTTACGCGACCCCCGAGCGGTCGGCGTCCCCAACTTCTTAGAGGGACAAGTGGCGTTCAGCCAC
CCGAGATTGAGCAATAACAGGTCTGTGATGCCCTTAGATGICCGGGGCTGCACGCGCGCTACACTGACTGGCTCA
GCGTGTGCTACCTACGCCGGCAGGCGCGGGTAACCCGTTGAACCCATTGCGATGGGGATCGGGGATTGCAA
TTATTCCTCCATGAACGAGGAATCCAGTAAGTGCGGGTCATAAGCTTGCGTTGATTAAAGTCCCTGCCCTTTGTA
CACACCGCCCGTCGCTACTACCGATTGGATGGTTTGTAGAGGCCCTCGGATCGGCCCGCCGGGGTCGGCCACG
GCCCTGGCGGAGCGCTGA

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FIGURE 1041

GC GGCAACAGCGGGGCCGATGTGTAGTTGGTGACTGCCTCTCCAGATGCTGAGGTGCCTGTATCATTGGCACAGG
CCAGTGCTGAACCGTAGGTGGAGTAGGCTGTGCCTTCGGAAGCAGTATCTATTCACAATGAAGTTGCAGTCTCCC
GAATTC CAGTCACTTTTTCACAGAAGGACTGAAGAGTCTGACAGAATTATTTGTCAAAGAGAATCACGAATTAAGA
ATAGCAGGAGGAGCAGTGAGGGATTATTAATGGAGTAAAGCCTCAGGATATAGATTTTGCACCACCTGCTACC
CCTACTCAAATGAAGGAGATGTTTCAGTCGGCTGGGATTCGGATGATAAACACACAGAGGAGAAAAGCACGGAAACA
ATTACTGCCAGGCTTCATGAAGAAAATTTTGAGATTACTACACTACGGATTGATGTCACCACCTGATGGAAGACAT
GCTGAGGTAGAAATTACAACCTGACTGGCAGAAAGATGCGGAACGCAGAGATCTCACTATAAATCTATGTTTTTA
GGTTTTGATGGCAGCTTTATTTGACTACTTTAATGGTTATGAAGATTTAAAAATAAGAAAGTTAGATTGTTTGA
CATGCTAAACAGAGAATACAAGAGGATTATCTTAGAATTTTAAGATACTTCAGGTTTTATGGGAGAATTGTAGAC
AAACCTGGTGACCATGATCCTGAGACTTTGGAAGCAATTGCAGAAAATGCAAAAGGCTTGGCTGGAATATCAGGA
GAAAGGATTTGGGTGGAAGTGAAGAAAATCTTGTTGGTAACCATGTAAATCATTGATTCACCTTATCTATGAT
CTTGATGTGGCTCCTTATATAGGTTTACCTGCTAATGCAAGTTTAGAAGAATTTGACAAAGTCAGTAAAAATGTT
GATGGTTTTTACCAAGGCCAGTGACTCTTTTGGCCTCATTATTCAAAGTACAAGATGATGTCACAAAATGGAT
TTGAGGTTGAAGATCGCAAAAAGAGGAGAAAAACCTTGGCTTATTTATAGTTAAAAATAGGAAAGATTTAATTA
GCAACAGATAGTTCAGACCCATTGAAACCCATATCAAGACTTCATTATAGATTCTAGGGAACCTGATGCAACTACT
CGTGTATGTGAACCTACTGAAGTACCAAGGAGAGCACTGTCTCTAAAGGAAATGCAGCAGTGGTCCATTCTCCCA
TTTCTGTAAAGTGGCCATGACATCAGAAAAGTGGGCATTTCTTCAGGAAAAGAAATTTGGGGCTCTATTACAACAG
TTGCGAGAACAGTGGAAAAAAGTGGTTACCAAATGAAAAAGATGAACCTCTGAGTTACATAAAGAACCTAA
AACTGATGGCTACTAAAAAGCAGAGCATTT

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FIGURE 1042

GGACACCGGCCATGCACGCCCCAACTGAAGCTGCATCTCAAGCCGAAGATTCCAGCAGCCCAGGGGATTTC
AAGAGCTCTCAGACTCAGAGGAACATCTCGCGGAGAGACCCCGAAGCCCTCTCCAGGGCAGTCTCATCCAGACGCT
CGCGTAGTGCACAGAGAGCGCGCAGTGGCCCGGCTCGCCGCGCATGGAGCGGATCCCCAGCGCGCAACCCACC
CCCCGCTGCTGCCCAAAGCACCAGGACTGGAGCAGGAGACCTACCAGGGATGTACCTGCCCCACATGTACCA
AGTGTACAAGTCAAGACGGGGAAATAAGCGGAGCGAGGACAGCAAGGAGACCTACAAATTGCCGACCCGGCTCAT
CGAGAAAAGAGAGCTGACCGGATTAAACGAGTGCATCGCCAGCTGAAGGATCTCCTACCCGAACATCTCAAAT
TACAACCTTTGGGTCACTTGGAAAAAGCAGTGGTTCTTGAACCTTACCTTGAAGCATGTGAAAGCACTAACAAACCT
AATTGATCAGCAGCAGCAGAAAGTCAATTGCCCTGCAGAGTGGTTTACAAGCTGGTGAGCTGTACGGGAGAAATGT
CGAAACAGGTCAAGAGATGTTCTGCTCAGGTTTCCAGACATGTGCCCGGAGGTTGCTTCAGTATCTGGCCAAAGCA
CGAAGACACTCGGGACCTGAAGTCTTCGACAGTGTGACCCACCTCCACCGGTTGGTCTCGGAGCTGCTGCAGGG
TGGTACCTCCAGGAAGCCATCAGACCCAGCTCCCAAAGTGATGGACTTCAAGGAAAAACCCAGCTCTCCGGCCAA
AGGTTTCGGAAGTCTCGGAAAAATGCGCTGCCAGTCATCCAGCGGACTTTCGCTCACTCGAGTGGGGAGCAGAG
CGGCAGCGACCGGACACAGACAGTGGCTATGGAGGAGAATCGGAGAAGGGCGACTTGGCAGTGAGCAGCCGTG
CTTCAAAAGTGACCCAGGACGAGGTTACAGATGGGAGAAAAGGATCGGCGCAATTAAAGCAAGAGTCCGAAGAACC
CCCCACAAAAAGAACCGGATCGAGCTTTCGGATGATGAAGGCCATTTCACTAGCAGTGACCTGATCAGCTCCCC
GTTCTCGGGTCCACCCACACCCACAGCCTCCTTTCTGCGCTGCCCTTCTACCTGATCCCACCTTTCAGCGACTGCCTA
CCTGCCCATGCTGGAGAAAGTGTGATATCCACCTCAGTGCCAGTGCTATACCCAGGCCCTCAAGCCCTCTGCCGC
AGCCCTCTCTAGCTTCATGAACCCAGACAAGATCTCGGCTCCTTGTCTATGCCCCAGAGACTCCCTTCTCCCTT
GCCAGCTCATCCGTCGCTCGACTCTTCTGTCTTGCTCCAAGCTCTGAAGCCAATCCCCCTTTAAACTTAGAAGAC
CAAGACTCAAACTCTCTAGGGGATCCTGTGCTTTGCTTCTCTCGCTACTTCTCAAAAGACACAAAAAG
TTTTTGTAGATGCTGCAAGATTGTTGATGTATCTGAGTATCTGAGGCATGGAGACGAGATCAGGGTG
TGTGTGTGTGTGTGTGTGTGTATGTGCGTGTGCGTGACATGTGTGCCGTGCTGTTGGTATAGGACTTTAAAG
CTCCTTTTGGCATAGGGAAGTCACGAAGGATTGCTTGACATCAGGAGACTTGGGGGGGATTGTAGCAGACGCTGTG
GGCTTTTCCCCACCCAGAGAATAGCCCCCTTCGATACACATCAGCTGGATTTTCAAAAGCTTCAAAGTCTTGGTC
TGTGAGTCACTTTCAGTTTGGAGGCTGGGTCTGTGGCTTTGATCAGAAGGTACTTTCAAAAGAGGGCTTTCAG
GGCTCAGCTCCCAACAGCTGTAGGACCCACCCCTTTTGCCCTTATTGTGCGAGTGACTCACCAGACGTGCGGG
AGAGAGAGCAGTCAGACCGAGCTTCTGCTAATCAGGGGAGGTAGCAGGCACTGGCATAGCACGGTAGTGGTTTG
GGGAGGTTTCCGCAAGTCTGCTCCCCACCCCTGCCTCGGAAGAATAAAGAGAATGTAGTTCCTTACTCAGGCTTT
CGTAGTGATTAGCTTACTAAGGAATGAAATGGGCCCTTTGTACAAGCTGAGCTGCCCGGAGGGAGGGAGGAG
TTCCTTGGGCTTCTGGCAGCTGTTTCTAGGCTAACCTTAGTACTTACTGTGACGGGAACCAACCAAGGCTCTG
AGAAATGCGGACACCCGAGCGAGCACCCCAAAGTGACAAAGCTGAGTAAAAAGCTGCCCTTCAACAGAAC
TAGACTCAGTTTCAATTCCATCTCAAACTCCTTTTAAACAGCTTAGCTTCAAGAGGCTCAACCAAGCTTG
GCACCGCCAGATCCTTCTGTAGGCTAATTCCTTTGCCCAACCGGCATATGGAGTGTCTTATTGTCTAAAAAGGA
TTCGCTCTCCTTCAAAGAAATTTATTTTGGTCCAGAGTACTTGTTTCCGATGTGTCAGCCAGCTGTCGCGAG
CAGCTTTCAAAATGCACATATGCCGTGATTGCTGATCGTGTTTAACTTTTCTTTTCTGTTTTATTTTGGTAT
TAAGTCGTTGCCCTTATTGTAAAGCTGTATATAATATATATTATATAAATATATTAAAAAGGAAATGTTTCAG
ATGTTTATTGTATAATTACTTGTATCACAGTGAGAAAAAATGAATGTATTCCTGTTTTGAAGAGAAGAAATA
ATTTTTTTTTCTCAGGGAGAGGTACAGTGTATATTTTGGAGCCTTCTGAAGGTGTAAAAATTGTAATAT
TTTATCTATAGTAATGTTAAGTAGTGTGTTTAAAAACTTAATAAAAAATATCTTTTCTGTGGAAG

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FIGURE 1043

GCGGCTTCCGGCGCGTGAACCTGACCGCAAGAGGCCAATGGAGTGTGGGAGCTGAAAGGGTCTTCGCTGGCGGCC
GGTAACCTGGCGCGCGTGGGAACGCGGAGTGTGGCTCTCTGGTGTTCAGCTTGGGGAGAGAGGGGTGGCCTT
CCTCTTGCAGTTGAGGCGCGCGCGAGCGGACTTCAGCGGATCTCGTGGCGGAGCCATCTTGCTCCCTCTCC
CAGGCCTTTACCCGCTCCCTAGGATTCCCGGGCCCTGTAGTGGGAGTTGGGAGACGACAGTACTGCTTTTAAAG
AGACAGTGTTAGGATCTTGGAGCACAGCCAACATGTGTGACATTGAAGAAGCCATAACCAACTCCTAGATGT
GAACCTCATGGAACACAGAAGTCTGTACAAGTGACAGAAAGTGACCTCGGAAGTGAATCTGAGCTTCTAGTCAC
TATTGGAGCCACTGTACTACTGGCTTTGAGCAACAGCTGCAGATGAAGTCAGAGAGAACTTGGGTCAATCAC
CAAAATCAGCAGAGACCGTGGCAAGATATATTTTGTGATTTCAGTGGAAAGTCTGGCAGAGGTTCAATTGTCTGAG
ATCAGTTGATAACTTATTTGGTGGTTCAGGAGTTTCAAGATTACCAGTTCAACACAAAGGAAGAAGTCTT
AAAGGATTTTGAAGACTTGGCTGGAAAACCTCCCATGGTCAAACCCCTTAAAAGTGTGGAAAAATTAATGCCAGTTT
TAAAAAGAAAAAGCAAGCGCAAAAAGATAAATCAGAAATTCAGTAAAGAGAGAAGATTAAATAGGCAAGAAGT
CAAAATCGATCAGAGAAATGTTAAAAAGAGTTCACTAGCCATGCTTTAGATTCTCATATCTTAGATTATTATGA
AAATCCAGCCATCAAGAGGAGTGTATCAACATTAATAGGTGATGATTTGGCATCTTGCAAAAGATGAGACTGATGA
AAGCTCAAAAGAAAGAACTGAGCCTCAAGTGTGAAGTTTAGAGTCACATGCAACAGGGCAGGAGAGAAACATTG
CTTTACCTCAAATGAGGCTGCAAGAGATTTTGGGGTGCTGTTCAAGATTATTTTAAAGTGAAGGCCGACATGAC
CAACTTTGATGTGGAGGTTCTTTTGAACATCCATGATAATGAAGTCAATTGTGGGCATTGCATTGACTGAAGAGAG
TCTCCACCGAAGAAATATAACACATTTTGGACCTACAACCTCTTAGATCAACTCTTGCCATTATGGGATGCTCAGGCT
CTGTGATCTCTACCTTATGATATAATAGTCGATCCAATGTGTGGAACCTGGGCAATACCAATAGAGGGGGCCAC
TGAATGGCTGACTGTTTCCATATTGCTGTGTGATAATAATCCACTGGCTGTGAATAGAGCAGCAAAATACATTGC
ATCTTTATTGACCAAGAGCCAAATTAAGAAAGGCAAAACCTCTTGGGGCTTGCCCATAGATGCTGTTTCAAGTGGGA
TATCTGCAATCTGAGGCTTGAAGACTGGCTCTGTGATATTATGTAAAGATTTGGCAATTTGGAAAAAGGATGGG
ATCCAAGAAGAGAACTGGAACCTTTATCCAGCTTGCTACGCGAGATGAGCCGTGCTGCAACCTTACCACAGG
CCGAGCTGTACTACTTACTCAAGACACAAAATGCTTTACCAAGCGGTTATCTGGAATGCAACAGTATGGCGAAA
GGTGGATACAGTCTGGGTGAACGTTGGTGGTCTTCGTGCTGCAAGTTTACGTTCTGATACGTACACCTCAAAGCTTT
TGTTTCACTCTTCAAGCAAGACGGAGAAAGAGGAACTCTTGGCAATGCAAAAGATGAGATGACTAATAGTACT
TGTACTTCCCACCTCGAAATGTTAGCATAAAGAACTTGGAGAGGAAAAAGTATTAAACAAAATCGCAGTCTG
CACTCTTTAAACCTGTTTAAAGGCTCTTCATCCTGGTGTAGCAAAAGGTGTGAATGTAAATGTGATGGAATTTAAAG
TTTTATGAGACCGGACAGTGGCTCAGCACTGTAATTCAGCAGTTTAGGAAGCCGAAGTGTGCAGATCACCTG
AGGTCGGAACGACGAGCCTGGCAACATGGTGAACCCCTGTCTCTACTAGAAATACAAAAATTAGCCAGGTGTGGT
GGCGGGCGCCTGTAATCCCACTACTCAGGAGGCTGAGGCTAGAGAATCACTTGAACCCAGCAGGCGGAGGTGCG
GGTGAGTCGAGATCAGCCATTGCACTCCAGCCTGTGCGCAAGAGCGAACTCTGTCTCAAAAAGATTTTATAA
GAAGACGAGGCTTTCTTCTGAAGCTTTTCTTGAAGTGTAGCTTTAATAGTATTTTGTGAAAAATACTTTAAAGAT
GCCATAGTGAAGAGCCTACTAAAGTGCTGTGAGATTGGGGTTTGAACATTTTATTTTCAAGGCTTTATGGCCATT
TTCCATTGTGTCAAGTGCAAACTACCTCGCCAAAGGAAGGCGAGAACATAAATTACATCTTAGGCCACATT
TCATTCTTTGCAGCTTTGTCTAATCCAGTTGCTCAAGTCTTTTACCTCAACCTGAAGGAATGAAGCATTATTACAT
TTTGTGAATGTGTGTGAGCCTATAAGACGAAGTCTCACAAGACCTATAGGAAGGTTTACCATCTGCCTAAATATT
AAAAATCCATCTGTGTTATTCACATTAATACAGAAATGAAGGCTTAGGAATTAACAAGGTACTGCAAA
AATACGTATAGAATTTATTGTAAATAGCATAATGATAGATGGGGTGTGGGACCAACAAACCAATTTAA
AGAAATGTTTTTCTTTCAGTACACTAAGGTGTGTGTTTCAAAACC

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FIGURE 1044

MCDIEEATNQLLDVNLHENQKSVQVTESDLGSESELLVTIGATVPTGFEQTAADDEVREKLGSSCKISRDRGKIYF
VISVESLAQVHCLRSVDNLFVVVQEFQDYQFKQTKEEVLKDFEDLAGKLPWSNPLKVWKINASFKKKAKRKKIN
QNSSKEKINNGQEVKIDQRNVKKEFTSHALDSHILDYYENPAIKEDVSTLIGDDLASCDETDSSKEETEPQVL
KFRVTCNRAGEKHCFTSNEAARDFGGAVQDYFKWKADMTNFDVEVLLNIHDNEVIVGIALTEESLHRRNITHFGP
TTLRSTLAYGMLRLCDPLPYDIIIVDPMCCTGAIP IEGATEWSDCFHIAGDNNPLAVNRAANNIASLLTKSQIKEG
KPSWGLPIDAVQWDICNLPLRTGSVDIIVTDLPFGKRMGSKKRNNWLYPACLREMSRVCTPTTGRAVLLTQDTKC
FTKALSGMQHVWRKVDTVWVNVGGLRAAVYVLIRTPQAFVHPSEQDGERGTLWQCKE

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FIGURE 1045

GCAGGCAGGTGCCATGGGCCCGCTTGAGGCACACTGAGGGGACGCGGGGCTGGGCCATGGCCGGCGCTCGGGCCC
CCGCCGCCGCTGCCCTCGCGGGGTCCTCGGCCTCTTCAGGCAACAGCCGCTCAGGAGCTGGGGCTTGGGGAGC
TGCTGGAGAGITTCGCCGACTCAGTACCGGGCCAAGGATGGCAGCGGGACCGCGGCTCTAAGGTTGAGCGCA
TTGAGAAGAGATGTCTGGAGCTGTTGGCCGAGACTACTGTTTCAGCGTGATTCCAAACACGAATGGGGATATCT
GTGGCCACTATCCCGGCACATCGTGTTCTGGAGTATGAGAGTTCTGAGAAGGAGAAAGACACGTTTGAAGAGTA
CCGTACAGGTGAGCAAGTTGCAAGACCTCATCCACCGCAGCAAGATCGCCCGGTGCAGAGGACGTTTGTCTGCC
CAGTAATCCTGTTCAAGGGCAAGCACATTTGCAGGTCGGCCACACTGGCTGGATGGGGAGAGCTGTATGGACGCT
CAGGCTACAACATATTTTTCTCAGGGGGTGCAAGTATGCCTGGGCAGATGTGGAGGACGTACGGAGGAGGACT
GTGCTCTTCGAAGTGGTGACACGCATCTTTTTGATAAGGTCAGAGGCTATGACATCAAGTCGCTTCGATACCTGT
CAGTCAAAATACATCTGTGACCTGATGGTGGAGAAACAAGAGGTGAAGTTTGGCATGAATGTAACCTCCTCTGAGA
AGGTGGACAAAGCCCGAGCGCTATGCCGACTTCACTCTCCTCTCCATCCCGTATCAGGCTGTGAATTTTCAAGG
AATATAAAGATCGGGATTACATGGCAGAAGGGCTCATATTTAACTGGAAGCAGGACTACGTTGATGCCCCATTGA
GCATCCCGGACTTCTGACTCACTCTCTGAACATTGACTGGAGCCAGTATCAGTGTGGGATCTGGTGCAACAAA
CACAAAACACTACTGAAGCTGCTGCTTTCCITTAGTTAACAGTGATGATGACAGCGGGCTGCTGGTACACTGTATCT
CAGGCTGGGATCGGACCCCTCTCTCATCTCCTCTCGCCCTTCTCTGTGGGCTGATGGGCTCATCCACACGT
CCCTGAAGCCCACTGAGATCCTCTACCTCACTGTGGCCTATGACTGGTTCCTCTTCGGGCACATGTTGGTAGATC
GGCTCAGCAAAAGGGAGAGATTTCTCTCTTGCTCAATTTTTTGAAGCATATTACCTCCGAGGAGTCTCTCTG
CTCTGAAGACCCAGAGGAGGAAGAGTTTGCCAGCCCGGGATGGAGGCTTCACTTGGGAAGACATCTGCATGCTGA
GACGAAAGGACCGTGGCAGCACCAACAGCCTTGGCAGCGACTTCTCCCTGGTCATGGAGAGTTCCCCAGGAGCCA
CTGGGAGCTTCACTATGAGGCGGTGGAGCTGGTCCCAGCAGGAGCGCAACTCAGGCAGCTTGGCTTCAGCCCC
TGAGTGATCGAGAGACTCGGCTGAGGAGGTGGCTCAGCCTTCTTGGCTGCGTACAGCAGCAGTGGGGCTTC
GGGCAGTAGCCCCAGTCTTCCGGTGCCATCGGGGGCTGCTGGAGCAATTTGCCCGTGGTGTGGACTCCGGA
GCATCAGCAGCAATGCTTTGGAAGAAGCCAGCCCATGACATTTTCTGCTCTCTCTCAGCTGAGCCCTTAGCA
GAGAATCAAAGCCATGCCTGGCCGAAGGGTACTTCCAGGTGAGGGGAAATTTTCACTCCCCATCTCCATCATGA
ACATGGCAGCCCCAAGCTGAGCAAGGCCAAAGACAGGGTTTCCAACCCCGACCTCTTGAAGTGTGACCCACCA
CCCCCTCTGTCACTGTCTCCACCCACCCCATCTTTGCTGGGATTCCCATCACTCTCAGAAGTGTGTGGGGTT
TCCTTGGGGCTTGTGGAAGCCATGACTTCCAAAGACCCCTACCTGTCAAGTCTTGTCTTGGGGAGGAGGGATC
ACCTGCACTGAGAATGAGGCAGTTTGACACAGATCACAAATAAAATCAAGTCTTTTGAATAAAAAAAAAAAAA
AAA

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FIGURE 1046

MARCRGRFVCPVILFKGKHICRSATLAGWGELYGRSGYNYFFSGGADDAWADVEDVTEEDCALRSGDTHLFDKVR
GYDIKLLRYLSVKYICDLMVENKKVKFGMNVTSSEKVDKAQRYADFTLLSIPYPGCEFFKEYKDRDYMAEGLIFN
WKQDYVDAPLSIPDFLTHSLNIDWSQYQCWDLVQQTONYKLLLSLVNSDDDSGLLVHCISGWDRTPLFISLLRL
SLWADGLIHTSLKPTILYLTVAIDWFLFGHMLVDRLSKGEEIFFCFNFLKHITSEEFSAKLTQRRKSLPARDG
GFTLEDICMLRRKDRGSTTISLGSDFSLVMESSPGATGSFTYEAVELVPAGAPTQAANLAALSDRETRLQEVRSFAF
LAAYSSTVGLRAVAPSPSGAIGGLLEQFARGVGLRSISSNAL

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FIGURE 1047A

CCGGACTCGAGGTGCGCGATGTGACAGCAATCGGGGTGGACTTTGATGTGAAGACTTTCTGCCACAACCTTGGCGGC
 GACTAAGCCACATACAGAGTGCCCGGTGGAGACCTGCCGAAAGGTTCTACAGAGTTACAGTGGTATTAGTACCA
 CCTGTACCATTATGACACGACAAACCCACCCCAACAACTCCACTCCGCAAGCACAAGAAAAGGGGG
 CCAGTCAAGCCGCCAGCCAAACAGCAGTACCACGCCCTCAGAGGTCTCAGAGTACCAGGCCGTGAGGTGTAGT
 CTATGCAAGCGCCACGCGATGGTGGAGGTGGACTTGCATGGCCGCGTCCACCGCATCAGCATCTTTGACAACT
 GGATGTGGTGTCTCAGAGGATGAGGAAGCCCGGAGAGGCCCTGAGAATCCGCAAGCAACAGGAGAACTGAGAC
 ACCAGCTGCTACTCCAACTCAGGCAAAACATAAGAAACAAGGAGAAGCGCAAGGACTCCAAACCATCACCACCACA
 CAATGTTTCTGCGAGCACCACCTCCAACTGCCAGAGGTGGTCTATCGGGAGCTGGAACAGGAACTAGAGATATGC
 CCCACCCGGCCAACTTCTATATACCGGTACATCGAGAAGTCTGCGAGGAGCTGGAACAGGAACTAGAGATATGA
 CATGGAACGAGGAGGACTACATCTGGCTGGATATCATGAATGAGCGTCCGGAAGACAGAGGGTGTAACTCCATCCC
 GCAGGAGATCTTTGAGTACCTAATGGACCGACTGGAGAAGGAGTCTGATCTTGGAGATCATATAAAGGCGACCC
 TAATGCGCTAGTGGACGAGGATGCTGTTTGCTGTATCTGCAATGATGGTAGTGGCCAGAACAGCAATGTCTATCT
 CTTCTGTGACATGTGCAACTTGGCCGTGACACAGGAGTGCTACGGTGTCCCTATATCCCTGAGGGCCAGTGGCT
 GTGCCCGCGTTGCTCGAGTCACTCTCTGCTGTGGATTGTGCCCTGTGCCCAACAGGGCGGTGCCCTTCAA
 CGACAGCATGACGGCGCTGGGCCCATGTGGTGTGTGCCCTGTGGATCTCTGAGTCTGCTTCCGCAACACGGT
 TCTCTTAGAGCCTATTGACAGCATTTAGCACATCCCAACGACTCGCTGGAAGCTCACTGGTACATTTGCAAAACA
 ACGGGGCTCAGGGGCGTGCATCCAGTGCCACAAGGCCAAGTGTATACAGAGTTTCAATGTGACATGCGGCCAGCA
 GGGTGGCTTTACATGAAGATGGAGCCTGTGCGGGAGACAGGCGCCAAACGCGCACTCTTTCAGTGTCCGCAAGAC
 AGCCTACTGCGACATCCACACGCTCCAGGTTACAGCAGCGGACTGCTGCCCTGTCCCACAGCGAGGTGAGGA
 GGTATGAAGATGAGGAGGAGGATGAGGGTAAGGGCTGGAGCTCAGAGAAAGTCAAGAGGGCAAGGCCAAGTCCCG
 GATCAAAATGAAGGCAAGGCAAGATCTGCGCAGAGAAGCGGGCAGCAGACCTGTGGTGTGCTGAGTGGCTGCAT
 CCCACCAACAGGGCTTAGTAAATACCAACCGCTGACCATCCAAAGGAAGAGCCAGTTTATGACAGAGCTGCA
 CAGCTACTGGACATGAAGCGCAGTCAAGGAATGGGTCCCATTGTCTACGTGCGCTGACAGACACCTGCAATCT
 TCAGAGGAAGTGTGACCAAGTTGCGGAGAGATTCTGAGGATAAAGAACTGGGGCCCTTAAAGAACAGCTCAAGTCTCTG
 GCAGCGGCTCGCGCATGACTTGGAGCGAGCTCGCTGCTGCTGGAATTGAATCCGCAAGGGGAAAACTCAAAAG
 GGAGACGATCAAGGTTTACAGGATTGCCATGGAGATGCAGCTGACTCCTTTCTCATCTCTTCGCAAAACCTT
 GGAGCAGCTCCAAGAGAAGGACACAGGCAACATCTTACGAGGACCGGTCCTCTGTCTGAGGTACCTGACTACCT
 AGACCACATCAAAAGGCCCATGGACTTTTACCATGAAGCAGAAGTTTGGAGGCTTACCGCTACCTGAATTTTGA
 TGATTTTGGAGGAGCTTCAACTCATCTGACAGCACTGCTCAAGTATAACGCAAGGACACCATCTTCTTACCG
 GGCAGCAGTGGCGCTCTGCTGACGAGGTTGGTGTCTGTCTCGCCAGGCGCGGCCAGGCAGCAAAAATGGGCAT
 TGACTTTGAGACGGGCATGCATATCCCCACAGCTGGCTGGAGATGAGGCCACACACACTGAGAGTGCAGC
 CGAGGAAGACGGGCTGTGCTGTGCTGGAGAAACCAAGCACTGCCAGTGGAAAGAACAGTAAAGCTGCTTCTGGA
 CGCGCTGGAAGAGTGAATGCCAGCAGCAGAGTGTGGGCGCTCACGGCTGCAAGAGATGATCAAGAAAGAGAT
 CAGCGCATCTCGCGCGGAAGCTTGGCCATCAGCGAGAGACGGGACGTGATGGCCCTGAGCGGCTGCGCCCTCGAG
 CGGGGGTAGTCTGACACCCACCCGCGACGCTGTGACAAGGATGGGCAGACAGATAGTGGCGCAGAGGAGAGCAG
 CAGCCAGGAGACAGCAAGAGGCGTGGTCCCAACATGTCTTCAACCCCGCAGATGAGGTGGGCAGAGAACTC
 AGTTCTGTCTTCCAAAAGAACCCGGAAGACAGCTGGACCGCCCAAGAGGCGGGCGGCCCAAAACCGGGA
 GAGCAGATGACCCCGAGCCAGGAGGACGTCTGTGGGCGCCCGCCAGCTCCCATCATGAGTTCCCTGCTGCA
 CGCAAGCGGGGTAGAGAGCCCGCCAGTTCGAGCTCAGACAGCAGTGTCCCGTGGATGCTGTGACCTCGTGGG
 AATGGACTTACCAAGCCATGGCTTACGCGTGGAAACCAACAGTGAAGAGAGTTTCTTGGTATACCGTAAATGA
 CTGCAAGCTTCCCGGAGCAGCTCAGACTCTGAGTCCAGCAGCAGTAGCAGTAGCAGCGCTGCTTACAGCCGAG
 CAGCACAACCGCTTCAAAACAAGCCGGGCAACCCCTCTTCTCGGGGCACTTCCGAGAGGACAGCAGTGA
 GGATACCTCAGGCACTGAGAAATGAGGCCCTACTCCGTGGGCACTGGCCCGCGGCTGGGCCACAGCATGGTAAGGAA
 GAGTCTGGGCGGGGAGCTGGCTGCTCAGAGGATGAGGACTCCCGTGGATGCTGTGACCTCGTGTGGG
 CAAATGCCAGGCTATCCATCATACCCAGCTCTGATCATTGATCAAAGATGCCCGGAGAAGGTATGTTCCACCA
 TGGGGTTCCTTCCCTGCTGCCCCACTGGAGGTGCTGAAACTTGGGGAGCAGATGACCCAGGAAGCCGAGGCA
 TCTCTACTCTGCTCTTCTTTAGCAAAACCAAGAACTGGCAGTGGCTGCCACAGGAAAGCTGTTCTCTGGG
 TGTGAACCAAGACCTAGACAAGGAGAAATGCTGGAGGGCGCAAGTCCAACATCCGCAAGTCACTACAGATCGC

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FIGURE 1047B

CTACCACAGGGCTCTGCAGCACCCGAGCAAGGTGCAAGGCGAGCAGAGCAGTGAGACCAGCGATAGTGATTGATA
CTGCTCAACACAGCCCAACCTATAGTGCCCTGTGACTTCTCTCCTCCCTTTGCTCACTGTCCTGGAGTGGCACC
GGCCTCTGCACTGACTCATTCTGGTCTTGGGGCCAGTCTCAGGGGAAGCTGGGTGGGGGAGGTCCCTCCTGCCC
TAAGTGCAGCTGGACTGTACAGAACTCCAAGGGCCAATGGCAGTTCAGCGCAAGGAGAGGGAGGGCCACAGG
TCAGAAAAAGCTCCAGAGACCTCACAGCATTGTAGGGCGGGGTGGTGGGCCAAAGTTAGGACACTGCGTAAACA
GGCCATCCCACCACTCTACCTGCTCATGCCAGGAGAATCCATAACTGCCTAGAGGCTGGGGCCCCCTACCGGTC
GTGAGGTGAGTGGGCACTGTCCAGCCTGGAAGAGGGGCACTAGGTGACTCCCTCCCTGCTGTTGTAATACTG
TAATTATCGGAGAATTTAAATTATTCATTGTAACTGCGTTTCCGGGTCGCGCCAGAGTCATTGGTACTAAA
AAAAAAAAAAAAAGACTGGGGGCTGTCCCATTTCCCTTCTCTTCCCATAGATTCCCCCACCTTCAAACCTG
GTTTGTAATTTATTTCAAAGGAAGAAAATATATTGATTCTTAGAAAAATAA

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FIGURE 1048

MGVDFDVKTFCBNLRATKPPYECPVETCRKVYKSYSGIEYHLYHYDHDNPPPPQQTPLRKHKKKGRQSRPANKQS
PSPSEVSQSPGREVMSYAQAQRMVEVDLHGRVHRISIFDNLDVVSDEEAEPEAPENGSNKENTETPAATPKSGK
HKNKEKRKDSNHHHHHNVSASTTPKLPVVYRELEQDTPDAPPRPTSYYRYIEKSAEELDEVEYDMEEDDYIWL
DIMNERRKTEGVSPPIQEIFEYLMORLEKESYFESHNGDPNALVDEDAVCCICNDGECQNSNVILFCDMCNLAV
HQECYGVPIYIEGQWLCRRCLQSPSRAVDCALCPNKGGAFFKQTDGGRWAHVVCALWIPEVCFANTVFLFEPIDSIE
HIPPARWKLTICYICKRQSGGACIQCCHKANCYTAHVTCQAQAGLYMKMEPVRETGANGTSFSVRKTAYCDIHTPP
GSARRLPALSHSEGEDEDEEDEDGKGSSEKVKKAKAKSRIKMKKARKILAEKRAAAPVVSVPICIPHRLSKIT
NRLTIQRKSQFMQRLHSYWLKQRQSRNGVPLLRRLQTHLQSQNRNCDQVGRDSEDKNWALKEQLKSWQLRRLDRLER
ARLLVELIRKREKLKRETIKVQQIAMEMQLTPFLILLRKTLEQLQEKDTGNIFSEPVPVLESEVPDYLDHIKKPMDF
FTMKQNL EAYRYLNFDDFEEDFNLI VSNCLKYNAKDTIFYRAAVRLREQGGAVLRQARRQAEKMGIDFETGMHIP
HSLAGDEATHHTEDAAEEERLVLENQKHLPEEQKLKLLERLDEVNASKQSVGRSRRAKMIKKEMTALRRKLAH
QRETGRDGP ERHGPSRSGSLTPHPAACDKDQDTSAAEESSQETS KGLGPNMSSSTPAHEVGRRTSVLFSKKNPK
TAGPPKRPGRPPKNRESQMTPSHGGSPVGGPPQLPIMSSLRQRKRGSRPRPSSSSSDSDSKSTEDPPMDLPANGFS
GGNQPVKKSFLVYRNDCSLPRSSSDSESSSSSSSSAASDRTSTTPSKQGRGKPSFSRGTFPEDSSSDTSGTENEA
YSVGTGRGVGHSMVRKSLGRGAGWLSEDEDSPLDALDLVWAKCRGYPSPALIIDPKMPREGMFHFGVPIPVVPL
EVLKLGEMTQAREHLYLVLFDNKRTWQWLPRTKLVPLGVNQDLDEKMLEGRKSNIRKSVQIAYHRLAQHRS
KVQGEQSSETSDSD

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FIGURE 1049

GTACCCCCATCCTTTCTCTGCCCCCTCTACCCGCGAGCTCCTGGCGCTCGGCGGGGCTAACTGCAGCGCGGAGAT
CTCGGCGCGCAAGCTCGGCCTCCCGCCCCGGGCTGTGCCCCGGGGCTCGCTGAGGCCGACACCCCGACCCAC
CTCTAGCGGCTTTGCTCGAGGGCCACCTTCTTCCACCCCGCGCAAACTCCAGTAGGCTCGCCCTCGCTGACTCC
CCGCCCCCGCGTCAACTGCAGAGGGGCCCGCCATAGCCAGTTCCGGGGCGGTGCTCAGCTGACCGGAACTCCC
CGCCCCCTCCCGGGCCCTGGGGCCGTAGGAGGCCGCGAGCGAGGAGTAGAGGGGGCGGGGTGCGCACTAGGGT
GTCCTTAGAGAACGAGGACTCTGAAGCGGGACATTGGGCGACCCCCGGGCGGGGCGAGCCATTAAACAGTCCC
ACTTCTGTGCCAGCACTGAACTGGGCTCTTGACGGGCATCATCTCTTAATCCTCAGAACATCCAGGGAGCTCC
ACAGGATCCCATATCCTGGGCCATCAGTGTGAGTTGAAAGACTGCCCTTGCACTCCACGACTTCAAGTCTGTGG
ATCAGCTGAAGGTCTGTCCCCGCTACACGGCAGTGCTGGCAGCTCTGAGGATGATGGCATCGGCATCGAGGAGC
TGGACACCTTCGAGCTGGAGCTGGAGACCTGCTGTCTTCTGCCAGCCGGCGCTGCGTGTGCTTGAGGGCGAAA
CCCAGATCCTCACCAGCTGGCAGGATAAGAAAGGTGACAGACGATTCTGAAGCTGGGTGAGACCATGAACCTTG
GAGCTCCCCCAAACATGGGAAGCCCAAGAACAGAACTGGAAGGGAAGGCAGGACATGGGCCGGGCCCTGGCC
CAGGACGGCCCAATCCAAAAACCTTCAGCCCAAGATCCAGGAATATGAATTCACTGATGACCTATCGACGTGC
CACGGATCCCCAAAAATGATGCCCCCAACAGGTTCTGGGCTTCAGTGAGCCCTACTGTGCTGACATCACCAGCG
AGGAGGTCCGCACACTTGAGGAGTACTGAAGCCCCAGAAGATGAGGCTGAGCATTACAAGATCCCAACCCCTGG
GGAAGCACTACTCCAGCGCTGGGCCAGGAGGACCTGCTGAGGAGCAGAAAGATGGGGCCCGGGCAGCGGCTG
TGCTGACAGAAGAAAGGCCCTCATGGGGCACTGACCGAACTGGACACTAAAGATGTGGATGCCCTGTCTGAAGA
AGTCTGAGGCCAGCATGAACAGCCGGAAGATGGATGCCCTTTGGTGCCCTGACGAGCGCCTCCTGCAAGCCC
TGGTGGAGGAAAAATATTATTCCCTATGGAGGATTCTCCTATTCTGACATGTCTGGGAAGAAATCAGGGGCTG
ACGGGGCAAGCACTCCCTCGCAATCAGAACAAAGCCCTTCAGTGTGCCGCACTAAAGTCCCTGGAGAGCCGCA
TCAAGGAGGAGCTAATTGCCAGGGCCCTTTGGAGTCTGAGGACCGCCCGCAGAGGACTCCGAGGATGAGTCC
TTGCTGAGCTTCGCAAAAGCGCAGGCTGAGCTGAAGGCACTTAGTGCCCAACAACCGCAACGAAGACACGACCTGC
TGAGGCTGGCAAGGAGGAGGTGAGCGCGCAGGAGCTGAGGCAAGCGGTGCGCATGGCTGACAACGAGGTCATGG
ACGCCTTTTCGAAGATCATGGCTGCCCCGCAAGAAAGCGGACTCCCAACGAAGAAAGGACACAGGCTTGA
AGACTCTGAAGGAGCGTGAGAGCATCTGAAGCTGCTGGATGGGTAGCCCTCACCCTGCTCAGGCTGATTATC
TGCCCTAGGGGAGGGGAAGGAGGCCACTTCTCTTTTGGGCACAGGAACATTTGGCCTGTGGCTGTCCCTCAA
ATGGCGGCACTCTTAGAGGGCCGTGGCCCTTCCCTGAGGTCTTTTGGCCTAGCTCTGTACAACAGGACACAG
GAAGCCCTGTGGGCTAGCCTGAGGCTAGTCTGTCTTGGTCCCGAGATGGGGTTGAGGGGACTTCGTTTCT
GGGTCTTCTCTTCCCTCTTTACCATCCCCCACTCCCTAATCCCCCTACCCCTGTCTCCCTTCAAGGACTTCTC
CCTGTGGTTTTGTAAAGTGCAAACTTAAGATAAAGTGAAGTGTGTTGTTTTCAAAAAAAAAAAAAA

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FIGURE 1050

MSELKDCPLQFHDFKSV DHLKVCPRYTAVLARSEDDGIGIEELDTLQLELETLLSSASRRLRVLEAETQILTDWQ
DKKGD RRFLKLGRDHELGA PPKHGKPKKQKLE GKAGHGP GPGP GRPKSKNLQP KIQEYFTDDFIDVPRIPKND A
PNRFWASVEPYCADITSEEVRTLEELLKPPEDAEHYKIPPLGKHYSQRWAQEDLLEE QKD GARAAA VADKKKGL
MGPLTELDTKDVDALLKKSEA QHEQPEDGCPFGALTQRLLQALVEENIISP MEDSPIPDMSGKESGADGASTSPR
NQNKPF SVPHTKSLESRIKEELIAQGLLESEDRPAEDSEDEVLAELRKRQAE LKALSAHNRTKKHDLRLAKEEV
SRQELRQRVRMADNEVMDAFRKIMAA RQKKRTP TKKEKDQAWKTLKERESILKLLDG

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FIGURE 1051

GTACCCCCATCCTTTCTCTCGCCCCCTCTACCCGACAGTCCTGGCGCTCGGCGGGGCTAACTGCAGCGCGGAGAT
CTCGGGCGCGCAAGCTCCGGCTCCCGCCCCGGGCTGTGCCCGGGGCTCGCCTGAGGCCAGCCACCCGACCCCCAC
CTCTAGCGGCTTTGCTCGAGGCCACCTTCTCCACCCCGGCAAACTCCAGTAGGCTCGCCTCGCTGACTCC
CGGCCCGCGTCAACTGCAAGGGGCGCCCATAGCCAGTTCCGGGGCGGTTGCTCACATCGACCAGAACTCCC
CGCCCCCTCCCGGGGCCCCGAGGGCCGTAGGAGGCGCGCAGCGAGGAGTAGAGGGGGCGGGGGTGCCTAGGGT
GTCCCTAGAGAACGAGGACTCTGAAGCGGGACATTGGCGCACCCCGGGCGGGGCCAGCCATTAAACAGTCCC
ACTTCTGTGCCAGACACTGAACTGGGCTCTTGACGGGCATCATCTCTTAATCCTCAGAACATCCAGGGAGCTCC
ACAGGATCCCCATATCCTGGGCCATGAGTGAAGACTGCCCTTGAGTCCACGACTTCAAGTCTGTGG
ATCACCTGAAGGTCTGTCCCCGCTACACGGCAGTGCTGGCACGCTCTGAGGATGATGGCATCGGCATCGAGGAGC
TGGACACCTCGACGCTGGAGCTGGAGACCTGCTGTCTTGTGCCAGCGCGGCTCGCTGTGTGCTTGAAGCCGAAA
CCCAGATCCTCACCAGCTGGCAGGATAAGAAAGGTGACAGACGATTCTGAAGCTGGGTCCAGACCATGAAGTGTG
GAGCTCCCCCAAACTGGGAAGCCAAAGACAGAACTGGAAGGGAAGGCAGGACATGGGCCGGGCGCTGGCC
CAGGACGGCCCAAACTCAAAAAACCTTCAGCCCAAGATCCAGGAATATGAATTCACTGATGACCTATCGACGTGC
CACGGATCCCCAAAAATGATGCCCCAAACAGGTTCTGGGCTTCAGTGGAGCCCTACTGTGTGACATCACCAGCG
AGGAGGTCCGCACACTTGAGGAGTTACTGAAAGCCCCAGAAAGATGAGGCTGAGCATTACAAGATCCCACCCCTGG
GGAAGCACTACTCCACGCTCGGGCCAGGAGGACCTGCTGGAGGAGCAGAAGGATGGGGCCCGGGCAGCGGCTG
TGGCTGACAAAGAAGAAAGCCCTCATGGGGCCACTGACCGAACTGGACACTAAAGATGTGGATGCCCTGCTGAAGA
AGTCTGAGGCCACGATGAACAGCGGAAGATGGATGCCCTTTGGTGCCCTGACGACGCGCTCTGAGCGCC
TGGTGGAGGAAAAATATTATTTCCCTATGAGGAGATTCTCCTATTCTGACATGTCTGGGAAAGAAATCAGGGGCTG
ACGGGCAAGCACCTCCCTCGCAATCAGAAACAAGCCCTTCAGTGTGCCGCATATAAGTCCCTGGAGAGCCGCA
TCAAAGGAGACTAATTGGCCAGGGCCCTTTTGGAGTCTGAGGACCGCCCGCAGGAGACTCCGAGGATGAGTCC
TTGCTGAGCTTCGCAAAAGCGCAGGCTGAGCTGAAGGCACCTTAGTGCCACAAACCGCACCAAGAACGACGACCTGC
TGAGGTGAGCGTTAGCAGGATGCACAGTCCCGGGGGTGGCTTGGAGGCTGTGGCCACGGCTAGTCACTTTTCTAG
GGGTTTTTACAAACAGGCTTTCCAACTCGGCTGGCTCTAAATCACCTGGAGAGCCTCGAAAAAACAGCAGTGGC
CAGTCCACCGGGTATGTCCCAAAACAATTTCTGATTCCACAGAGTGGGGCTCAGGCATCTGTGACTGACCGATTGA
TTTGATTGTTTTTTGTTTTTTTTTTGAGAGGGAGTCTCGCACTGTCAACCCAGGCTGGAGTGCAAGTGGCATG
ATCTCGGCTCACTGCAAGCTCCGCTCCAGGTTTCATGCCATTCTCCTGCCCTCAGCCTCCTGAGTAGCTGATACT
ACAGGCACCCACCACGCCCCAGCTAATTTTTTTGTTATTTTAGTAGAGACGGGGTTTACCCTGTGTAGCCAGG
ATGGTCTCGATCTCCTGACCTCGTGATCCACCCGCTCGGCCTCCCAAAGTGC CGGATTACAGGCGTGAGCCAC
TGCCTCGGCTAGTTTGGTTTTTAATTAATGTTAAAGGCATAATATAAAATGTATCTCCATGGGAGGCTGAGGC
AGGAGAATCAGTTGAACCTGGGAGGCGGAGGTTGCACTGAGCTGAGACTGACCACTTGCATTCCAGCTGGGCAAA
CAGAGTGAAACTGCATCTCAAAAAAAGAAAAAATTTTACGCTTCTTAACCATTTTTAAGTGTACAGTTT
AGTAGGTTTACCATATTACATTTGTTGTGTGATTATTTTTTGTCTTTTCATGCTTCTTTTCTTTTATCCCCA
AGTTTTGTTATTAATAATTTGATACACACAGAAAAATCTGAAGAATCATACATAAATCATCAGTATATTCTCCA
CCTAAAAAAGAAAAA

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FIGURE 1052

MSELKDCPLQFHDFKSVDHLKVCPRYTAVLARSEDDGIGIEELDTLQLELETLSSASRRLRVLEAETQILTDWQ
DKKGDRRFLKLGRDHELGAAPPKHGKPKKQKLECKAGHGPGPGPRPKSKNLQPKIQEYFTDDPIDVPRIPKND
PNRFWASVEPYCADITSEEVRTL EELLKPPEDAEHYKIPPLGKHYSQRWAQEDLLEEQKDGARAAVADKKKGL
MGPLTELDTKDVDALLKKSEAQHEQPEDGCGPFGALTQRLQLALVEENIISP MEDSP IPDMSGKESGADGASTSPR
NQNKPFVPHTKSLESRIKEELIAQG LLESEDRPAEDSEDEVLAELRKRQAE LKALS AHNRTKKHDLRL

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FIGURE 1053

GTACCCCCATCCTTTCTCTCGCCCCCTCTACCCGACAGTCCTGGCGCTCGGCGGGGCTAACTGCAGCGCGGAGAT
CTCGGCCGCCAAGCTCCGCTCCCGCCCCGGGCTGTGCCCGGGGCTCGCCTGAGGCCGACCCCGCACCCTCC
CTCTAGCGGCTTTGCTCGAGGCCACCTTCTTCCACCCCCGGCAAACCTCCAGTAGGCTCGCCCTCGCTGACTCC
CGCCCCCGCGTCAACTGCAAGGGGCCCGCCCATAGCCAGTTCCGGGGCGGTTGCTCACATGCACGGAACTCCC
CGCCCCCTCCCGCGGCCCTGGGGCCGTAGGAGGCCGAGCAGGAGGAGTAGAGGGGGCGGGGGTCGCACTAGGGT
GTCCTTAGAGAACGAGGACTCTGAAGCGGGACATTGGGCGACCCCCGGGCGGGGCCAGCCATTAAACAGTCCC
ACTTCTGTGCCAGACACTGAACTGGGCTCTTGACGGGCATCATCTCTTAATCCTCAGAACATCCAGGGAGCTCC
ACAGGATCCCCATATCTCGGCCATGAGTGAAGACTGCCCTTGCACTCCACGACTTCAAGTCTGTGG
ATCACCTGAAGGTCTGTCCCCGCTACACGGCAGTGTGGCACGCTCTGAGGATGATGGCATCGGACATCGAGGAGC
TGGACACCTTGACGCTGGAGCTGGAGACCTGCTGTCTTCTGCCAGCGGCGCTCGGTGTGCTTGAGGCCGAAA
CCAGATCTCACCAGCTGGCAGGATAAGAAAGGTGACAGACGATTCTGAACTGGGTGAGACCATGAACCTTG
GAGCTCCCCCAAACATGGGAAGCCCAAGAAAGCAGAACTGGAAGGGAAGGCAGGACATGGGCGGGGCCCTGGCC
CAGGACGGCCCAAATCCAAAACCTTCAGCCCAAGATCCAGGAATATGAATCACTGATGACCCATCGACGTGC
CACGGATCCCCAAAATGATGCCCCCAACAGGTTCTGGGCTTCAGTGAGGCCCTACTGTGCTGACATCACCAGCG
AGGAGGTCGCGACACTTGAGGAGTTACTGAAGCCCCAGAAAGATGAGGCTGAGCATTACAAAGATCCCACCCCTGG
GGAAGCACTACTCCAGCGCTGGGCCCAGGAGGACCTGCTGGAGGAGCAGAAGGATGGGGCCCCGGGCAGCGGCTG
TGCTGACAAAGAAAGGCCATCATGGGGCCACTGACCGAACTGGACACTAAAGATGTGGATGCCCTGCTGAAGA
AGTCTGAGGCCAGCATGAACAGCGCGGAAGATGGATGCCCTTTGGTGCCCTGACGACGCGCCCTCTCGAGGCC
TGGTGGAGGAAAATATTATTTCCCTATGGAGGATTCTCTATTCTGACATGTCTGGGAAAGAAATCAGGGGCTG
ACGGGGCAAGCACCTCCCCTCGCAATCAGAAACAGCCCTTCAGTGTGCCGCTACTAAGTCCCTGGAGAGCCGCA
TCAAGGAGGAGCTAATTGCCACGGGCCTTTGGAGTCTGAGGACCGCCCCGAGAGGACTCCGAGGATGAGGTCC
TTGCTGAGCTTCGAAACGGCAGGCTGAGCTGAAGGCACCTTAGTGCCCAACACCGCAACGAAGAGCACGACCTGC
TGAGGTGAGCGCTTAGCAGGATGCACAGTCCCGGGGGTGGGCTTGAGGCTGTGGCCACGGCTAGTCACCTTTCAG
GGGTTTTACAACAGGCTTTCCAATCCTGGCTGGCCTTAATCACTGGAGAGCCTCGAAAAAAACAGCAGTGGC
CAGTCCACCGGGTATGTCCCAAACAAATCTGATTCCACAGAGTGGGGCTCAGGCATCTGTGACTGACCGATTGA
TTTGATTTGTTTTGTTTTGTTTTTTTTTTGAGAGGGAGTCTCGCCTGGGCAACAAAGAGTGAACACTGCATCTCAAA
AAAAAAAAGAAAAAAATTTACGCTTCTTAACCAATTTTAAAGTGTACAGTTTAGTAGTGTACCCATATTCACAT
TGTTGTGTGATTTATTTTTTGTCTTTTCATGCTCTTTCTTTTTATCCCCAAGTTTTGTTATTAATAATTTGA
TACACACAGAAAATCTGAAAGAAATCATACAATAAACATCAGTATATTCTCCACCTAAAAAATAA

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FIGURE 1054

MSELKDCPLQFHDfKSVdHLKVCPRyTAVLARSedDGIgIEELDTlQLLEtLLSSASRRlRVLEAETQILTDWQ
DKKGDRRfLKLGRdHELGApPKHGKPKKQKLEGKAGHGPGPGGRPKSKNLQPKIQEYEFDDPIdVPRIPKNDa
PNRFWASVEPYCADITSEEVRTLEELLKPPeDEAEHYKIPPLGKHYSQRWAQEDLLEEQKDGARAAAVADKKKGL
MGPLTELDTKDvDALLKKSEaQHEQPEdGCPFGALTQRLLQALVEEN¹ISPMEDSPiPDMSGKESGADGASTSPR
NQNKPF²SVPHtKSLESRIKEELIAQGLLESEDRPAEdSEdVLAElRKRQAElKALSAHNRTKKHDLlR

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FIGURE 1055

CAGCCAGCGCCCGCGAATGACTGCCACTCTCCGCCCTACCTGAGTGCCGTGCGGGCCACATTGCAGGCTGCCCTC
TGCTTGGAGAACTTCTCTCCAGGTTGTGGAACGACACAACAGCCGGAAGTGGAAGTCAGGAGTAGCAAAGAG
CTCCTGTTACAACCTGTGACCATCAGCAGGAATGAGAAGGAAAAGGTTCTGATTGAGGGCTCCATCAACTCTGTC
CGGGTCAGCATTGCTGTGAAACAGGCTGATGAGATCGAGAAGATTTGTGCCACAAGTTCATGCGCTTCATGATG
ATGCGAGCAGAGAACTTCTTTATCCTTCGAAGGAAGCCTGTGGAGGGGTATGATATCAGCTTCTGATCACCAAC
TTCCACACAGAGCAGATGTACAAACACAAGTTGGTGGACTTTGTATCCACTTCATGGAGGAGATTGACAAGGAG
ATCAGTGAGATGAAGCTGTCACTCAATGCCCGTGCCCGCATTTGTGGCTGAAGAGTTCCTTAAGAATTTTAAACC
ATCTGGCTGGATCTCGTGGCCTTCCCCCTCAGACTACCCATGTCTCCACGAAGGCGTCCCTGGAGTCAC TCCCGA
GCAGCGCGGCGGCGGAGGAGTTGGGTTGGGGTGGGCATTTGATCGGGAGGTTGGGTGGTGTGCTTGTAGCTG
GGCAAGAAAGCAGCAGTGGACCTGCCCCAAGGCCACACGTGCCTGGTCAGGCTGGCTTCTGATGTTCACTCCCT
GGCGCGGACAGATTTTTTTAAACGCTTTGAAACTTAAACTCTGTGCTTGTAACAAAAAAAAAAAAAAAAAAAA

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FIGURE 1056

MTATLRPYLSAVRATLQAALCLENFSSQVVERHNKPEVEVRSSKELLQPVTISRNEKEKVLIEGSINSVRVSIA
VKQADEIEKILCHKFMRFMMRAENFFILRRKPVEGYDISFLITNFHTEQMYKHKLVDFVIHFMEEDKEISEMK
LSVNARARIVAEFLKNF

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FIGURE 1057

GCCTGCCTCTTCCAGAGAGACTCCCCATTGCTGTCTCTTGTGTGTGTCATGCACAAGGAAGGCTTGGTTGTGTG
CCAGGATAAGGGGCGACAAAGGCTTCGGGTGTGGCCAGAGACCCCATGCTTAAGCTTTTATGGTATAGGTCAGGCT
GCAGGGGTTTGAGGGCTCAGTTGTATATCAGAATCTTCAGAGCACTGCCATGTTTCAGGGGTGAGTCAGGCTCTGT
AGATGTGCACGGGGCTCTTCTGAAGGGTCAGTTTCTGTAATCACTTTCAGGTGTGTGAGGGGCTTGTGCAGTAACA
GTGCACACAGAAGTTAGTGTCTGTGGGCTAAGGGTTGTAGCTCTGTATCAGGATTCGGGAGTGGGCTCGGAT
TTCGTGGTGTGGACTTAAGAAGCTGTGTGCAGACTGGGGGAGGGGCGCTTCATGTATAACTGGGTTACATAGGCG
CAAGACTCCCAGGTGCATTTTAGGCAGAGCCTCAGGTGTGTTAGAGGTCCCAGGGGCGAGAGGGCTATAGGTGCT
GTCAAGGCGCTTGGGGACATTTAGGGCAGAGCCTCGAGTGACAGGTCCTGGGACAGTGGGAGCCAAAGGGCAAGTG
CTAGAGTTGCAGTGAATTTAGAGCAAGGCTCAGCTAAGTGACACATCCAGGGGAGTAGGGGATCTATCTAGGT
TCGTGCTGGGCTCAGGTAAGTGACAGGCTTAGGACAATGGGGCTGTGGCATGCTCAGGTTACCTGCCTTGA
TATGGGATCTGACAGGCCCCCTCCCTATGTGCAGGAGACAAAGCAGCCCAAGAACAGGAGAAAAACCCAGTGTG
GTGTCCCCAGAGTTTGTGGATGAAGCTCTGTGTGCTGCGAGGAGTACCTTAGCAACTTGGCCCCAATGGACATC
GACAAGGACCTGGAGGCCCCGCTGTACCTACCCCCGAGGCTGTGCTTCTTCCAGGGCTACTACCAAGTG
GTCCACGAAGGGGCGAAGACTCAGGCACTCGACACTCAGGTCAGGCTGTGAGGACATCTGCAGCAGCTGCAG
GCCGTGGTACCCAGATAGACATGGAAGGGGATCGCAACATCTGGATCTGGAAGCCAGGAGCCAAAGTCCCGCGGA
CGAGGCATCATGTGCATGGACCACTGGAGGAGATGCTGAAGCTGGTGAACGGCAACCCCGTGGTGTATGAAGGAC
GGCAAGTGGGTGGTGAGAAATATATTAGCGGGCCCCCTCCTCATCTTTGGCAACCAAGTTTGACTCAGACAGTGG
TTCTCTGGTAACTGACTGGAACCCACTTACCGTGTGGTTCTACCGCGACAGCTATATCCGCTTTTCCACGCAAGCC
TTCTCCCTGAAGAACCTGGACAACCTCAGTGCACCTGTGCAACAACCTCCATCCAGAAGCACTGGAGAACTCATGC
CATCGGCATCCACTGCTTCCCGCAGACAACATGTGGTCTAGCCAGAGGTTCCAGGGCCACCTGCAGGAGATGGGT
GCCCAAAATGCTTGGTCCACATCATCTGCTGCTGGCATGAAGGATGCTGTGATCCACGCATTCAGACCTCCAG
GACACCGTGCAGTGTGGGAAGGCCAGCTTTGAGCTCTATGGCGTGAAGTCTCGTGTTCGGGGAGGACTTCAGAGCC
TGGCTGATTGAGATCAACGCGAGCCCCACGATGGCACCCTCCACAGCAGTCACTGCCCGGCTCTGTGCTGGCGTG
CAAGCTGACACCTCGCGCTGGTCAATTGACCGGATGCTGGACCGCAACTGTGACACAGGAGCCCTTGAGCTCATC
TATAAGCAGCCGCTCACCACCTTCCCGAGCCTCCACCAAGGCCACGCTGCCTTCTCCCATGTACTCCGACACC
AGGGCCAGGTCCTCAGACGACAGCACAGCAAGCTGGTGGGCACTAAGGCCCTGTGCACACAGGCAAGGCCCTGA

GGACTCTACCCAGGGCTAAGGTCTTCATTTCCTCCCAACCGAACCTTGATTTCAAGGTGGCAGCCAGCATCCTGA
AGCCAGAAGAGGTGGGCTCGACTGTGACTCACACCCAGTGGACAGTGTGAGCACGGGGTCAGGGCTGGAGGG
CACAGGCAAGAGGCGATCCAGGCTGGCTGACCCCAAGGGAAGAGCTGGTCTCCCTCAGAAGCCCCCTTCTCT
CACAGACTTCTGATCATCTCCCTCTCTCCCTCTTTTACACCGAGGCTCCTCTCTCTCTGCTCCGAGGCC
CCGAGCTGGAAGTGCCCTTGTGGCTCTGCCCCTTTGAAGTCGGGAACAATTCTAGCACCTGTGCGAAGGTCAAGGC
CAAAGGCAAAATCAAGGGCAGACTGTGACAAACCCAGGGCTGAGGCTGCCCATGAAGAGGCTGAGCCCCCTGA
AACCCCTGCCCTTGTGGTACATTCCGAGGCGCAGGGGCTGGGGGATTAAGCTAGGGAAGCCCCCTGCTCT
GATTCCCACTGCCCCTTGTCTGGATCCACCAAAATAAAGAAACAAGTGAAGTAAAAAAAAAAAAAAAAAAAA
AAA

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FIGURE 1058

MDIDKDLEAPLYLTPEGWSLFQRYYQVVHEGAELRHLDTQVQRCEILQQLQAVVPQIDMEGDRNIWIVKPGAK
SRGRGIMCMDHLEMLKLVNGNPVVMKDGKVVQKYIERPLLI FGTKFDLRQWFLVTDWNP LTVWFYRDSYIRFS
TQPFSLKNLDNSVHLCNNSIQKHLNSCHRHPLLPDDNMWSSQRFQHLQEMGAPNAWSTIIVPGMKDAVIHALQ
TSQDTVQCRKASFELYGADFVFGEDFQPWLEINASPTMAPSTAVTARLCAGVQADTLRVVIDRMLDRNCDTGAF
ELIYKQPVTTSPASTPRPSCLLPMYSDTRARSSDDSTASWWALRPCRQARP

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FIGURE 1059

GTCTTGGCTCGGGAGATGGACGGCCGCCGTGTTTTGGGCCGGTTCTGGAGTGGCTGGCGGGGGCTGGGTGTC
CGCCAGTGCCCCGAGGACGCAGGCTTTGGCACCGAAGCCCGGCATCAGAGGCAACCCCGGGCTCCTGCCAACGG
TCGGGGCCCCTCGGGGACCAAGCCCTTCGGGGGGCTGCTGCCAAAAAACCCTCAGTCGGGAGGAGCTGTTGATGCG
CTGCGGGCAGCCGTGGTGGACCGGAAAGGAAAACAGGAGAGCTGACGTTGTTCTCAGTGTCTGCCAGAGCTGAGC
CAGTCCCTAGGGCTCAGGGAGCAGGAGCTTCAGGTTGTCCGAGCATCTGGGAAAGAAAGCTCTGGGCTTGACTC
CTCTCCAGCTGTCCCAGACAGCTAGTCGCCTCCAGAAGTACTTACCCATGCACGGAGAGCCCAAGGCCCCACA
GCCACCTACTGTGCTGTCACTGATGGGATCCAGCTGCTTCTGAGGGGAAGATCCAGGCTGCCCTGAAACTGGAA
CACATTGATGGGGTCAATCTCACAGTTCCAGTGAAGGCCCATCCGAAAGGACATCCTGGAAGGTGTCAAGAAG
ACTCTCAGTCACTTTCGTGTGGTAGCCACAGGCTCTGGCTGTGCCCTGGTCCAGCTGCAGCCACTGACAGTGTTC
TCCAGTCAACTACAGGTGCACATGGTACTACAGCTCTGCCCTGTGCTTGGGACCACATGTACTCTGCCCGTGTG
GGCAGCTGTCTTGGGCCAGCGATTTCTGTGCTGCCAGCTGAGAACAAAGCCCCAAAGACAGGTCTTGATGAAGCC
CTCCTCAGACGCTCCACCTGACCCCTCCAGGCTGCCAGCTGCCCTTGACCTCCACCTACATCGGCTCCTT
CTCCAGGCACCAAGGGCCAGGGACACCCCTGTGAGCTCTTGGCACCACTGCCCCCTTATTTCTCCAGGACCTTA
CAGTGCCTGGGGCTCCGCTTACAATAGTCTCCCTCTGTTCTGACCCCTCACACACACTGAAAAGTGAGGGTG
GGGGCTCTGCAGTCAGACAAACCTAAGATCATCATCTTGGACAGGCCACTTGCTTGCTGTGTGGCATTGGGCAAGT
AACCTTACCTCTTGGACTTGIGATAATAAAAGTTCTACCTC

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FIGURE 1060

ATAGGGTCAGTGGGCCGCTTGGCGGTGTCGTTGCGGTACCAAGTCCGCGTGAGGGGTTTCGGGGTTCTGGGCAGG
CACAA**TG**GCGTCTCGAGCAGGCCCGCAGCGGCCGGCACCGCAGCGGACTTTCAGCACCGGGAGCGCGTCGC
CATGCACTACCAGATGAGTGTGACTCTCAAGTATGAAATCAAGAAGCTGATCTACGTACATCTGGTCATATGGCT
GCTGCTGGTTGCTAAGATGAGCGTGGGACACCTGAGGCTCTTGTCACATGATCAGGTGGCCATGCCCTATCAGTG
GGAATACCCGTATTTGCTGAGCATTTTGCCCTCTCTCTTTGGGCCCTTCTCTCCTTTCCCCGCAACAACATTAGCTA
CCTGGTGCTCTCCATGATCAGCATGGGACTCTTTCCATCGCTCCACTCATTTATGGCAGCATGGAGATGTTCCC
TGCTGCACAGCAGCTCTACCGCATGGCAAGGCCACCGTTTCCCTCTTGGTCTTTCTGCCGTTTCCATCATGTA
CCTGGTGTTGGTGTGGCAGTGCAAGTGCAATGCCGTGGCAGTTGTACTACAGCAAGAAGCTCCTAGACTCTTGTT
CACCAGCACACAGGAGAAGAAGCATAAAT**TGA**AGCCTCTTTGGGGTGAAGCCTGGACATCCCATCGAATGAAAGGA
CACTAGTACAGCGGTTCCAAAATCCCTTCTGGTGATTTTAGCAGCTGTGATGTTGGTACCTGGTGACAGCAGGC
CAAAGTTCTGGAAGCTCCTTTTGCCATCTGCTGAGGTGGCAAACTATAATTTATCTCGTTGGCTAGAACTG
GGTGACCAACAGCTATGAAACAAATTCAGCTGTTTGAAGTTGAACCTTGAGGTTTTCTTTAAGAAATGAGCTTC
GTCCTTGCCCTACTCGGTCAATCTCCCATTTCCATCCATTACCCCTTAGCCATTGAGACTAAAGGAAATAGGG
AATAAATCAAATTACTTCATCTCTAGGTCACGGGTCAGGAAACATTTGGGCAGCTGCTCCCTTGGCAGGCTGTGG
TCTCCTCTGCAAAGCATTTTAATTA AAAACCTCAATAAAGA

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FIGURE 1061

MASRAGPRAAGTDGSDPQHRERVAMHYQMSVTLKYETKKLIYVHLVIWLLLVAKMSVGHRLRLSHDQVAMPYQWE
YPYLLSILFSLGLLSFPRNNISYLVLSMISMGLFSIAPLIYGSMMEMFPAAQQLYRHGKAYRFLFGFSVVSIMYL
VLVLAVQVHAWQLYYSKKLLDSWFTSTQEKKKH

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FIGURE 1062

GGAAGTTGAGCGCGCGCAAGAAATAATGCGCGGACGTACGGGGGATCCTGGACTCTCTAAACTGCAGTTTGCCCC
TTTTAGTAGTGCTTGATGTGGGTTTTGGCATGAGTTGACCCAGAAGAAGCTGAACGAGTATCGGCTGGATGA
AGCTCCCAAGGACATTAAAGGTTATTACTACAATGGTGACTCTGCTGGGCTGCAGCTCGCTTAACATTGGAGTT
CAGTGCTTTTGACATGAGTGCTCCCAACCCAGCCCGTTGCTGCCAGCTATTGGAACTGTATAACACCAACAC
ACTCGAGTCTTTCAAGACTGCAGATAGAAGCTCCTTTGGAAACAAGCAGCAAAATGAGATATGGGAATCCATAAA
ATCAGGCACTGCTCTTGAAAACCCGTACTCTCTCAACAAGTTCCTCTTGACATTTCAGAGATCTAAAGAAGTA
CCACTTCTACTATTGGTTTTGCTATCTCGCCCTCTGCTTCCAGAGAGTTTACCTCTCATTCAGGGGCCAGTGGG
TTTGGATCAAAAGTTTTCACTAAAACAGATTGAAGCACTAGAGTGTGCATATGATAATCTTTGTCAAAACAGAAGG
AGTCACAGCTCTTCCTTACTTCTTAATCAAGTATGATGAGAACATGGTGCTGGTTTCCTTGCTTAAACACTACAG
TGATTTCCTCAAGGTCAAAGGACGAAGATAACAATTTGGTGTATATGATCCCTGTAACCTTAGCCAGTACCCCTGG
ATGGCCCTTGAGGAATTTTTTGGTCTAGCAGCCACAGATGGAGTAGCAGTTTCCAGTCTGTTGAAGTTGTTTG
CTTCCTGACCGCTACCATGCAGGGGCGAGAGACGTTGCCACAGCATCATCTCGAAGTGAAGCTTCCAGAAAT
GGCATTAGCCAGATTGCTCTAAAGCAGTTGGATGGGAAAAGAACCAAGAGGAGCATGGGACCAAGGATGGT
GAACCTCAGTGAATGTATGGACCTAAAAGGTTAGCTGAGTCATCAGTGGATCTAAATCTCAAACCTGATGTGTTG
GAGATTGGTTCTTACTTTAGACTTGGACAAGGTTGTGTCTGCAAAATGCTGCTGCTTGGAGCCGCGACCTTGGG
TGCAATGTAGCTAGGACGTTGATGGGTTGGGCGTGAGACACATCACATTGTGGACAATGCCAAGATCTCCTTA
CTCCAATCCTGTGAGGCAGCCTCTCTATGAGTTTGAAGATTGCCTAGGGGTTGGTAAGCCCAAGGCTCTGGCAGC
AGCGGACCGGCTCCAGAAAATATTCCTCGGTGTGAATGCCAGAGGATTCAACATGAGCATACCTATGCTTGGGCA
TCCAGTGAACCTTCTCCAGTGTCACTCTGGAGCAAGCCGCGAGAGATGTGGAGCAACTGGAGCAGCTCATCGAAG
CCATGATGTCGTCTTCTTATTGATGAGACACCAAGGAGAGCCGGTGGCTTCTGCGCGCTATTGCTGCAAGCAAGAG
AAAGCTGGTCATCAATGCTGCTTTGGGATTTGACACATTTGTTGTATGAGACATGGTCTGAAGAAACCAAGCA
GCAAGGAGCTGGGGACCTTGTGTCCAACACCCCTGTGGCATCTGCTGACCTCCTGGGCTCATCGCTTTTGGCAA
CATCCTCGTTTACAAGCTTGGCTGCTACTTCTGCAATGATGTGGTGGCCCCAGGAGATTCAACGAGAGACCGGAC
CTTGGACCAAGCATGCACTGTGAGTGTGTCAGGACTGGCCGTGATTGCAAGAGCCCTGGCCGTGGAATTGATGGT
ATCTGTTTTGACGATCCAGAAAGGGGCTATGCCATTGCCAGCAGCAGTGACGATCGGATGAATGAGCCTCCAAC
CTCTCTTGGGCTTGTGCCCTACAGATCCGGGGATTCTTTACAGGTTTGATAATGTCTTCCGTGACGCTGGC
ATTTGACAAATGTACAGCTTGTCTTCCAAGTTCTTGATCAATATGAACGAGAAGGATTAACTTCTTAGCCAA
GGTGTTTAAATCTTACATCTCTTCTAGAAAGCTTGACTGGTCTTACATTGCTGCATCAAGAAACCAAGCTGC
TGAGATCTGGGACATGAGCGATGATGAGCCATCTGAGATGGCCCCGCTGTGGGGCTGACTTCTCCTTGGCCGCC
TGCTGAGGAGCTCTCCATGCCAGAGCAGGACTGCTGACCCAGGCTGGTGATTCTGGGCCCCCTCTCCATACC
CCGAGGTCTGGGATCCCCCTCTGCTGCCAGGAGTGCCAGTGTTCTGGCGTTGCTCGGGATTCAAGATACCAC
CAGTTCAGAGCTAAATAAACCCTTGGCCTTGGCCTTGCTATTGACCTGGGAAAAAAAAAAAAAAAAAAAA

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FIGURE 1063

MAAATGDPGLSKLQFAPFSSALDVGFWHELTQKKLNEYRLDEAPKDIKYYNGDSAGLPARLTLEFSAFDMSAP
TPARCCPAIGTLYNTNTLESFKTADKKLLLEQAANEIWESI KSGTALENPVLLNKFLLLTADLKKYHFYYWFCY
PALCLPESLPLIQGPVGLDQRFSLKQIEALECAYDNLQCTEGVTALPYFLIKYDENMVLVSLKHYSDFFQGGRT
KITIGVYDPCNLAQYPGWPLRNFVLVLAHRWSSSFQSVVVCFRDRTMQGARDVAHSII FEVKLPEMAFSPDCPK
AVGWEKNQKGGMGPRMVNLSECMDFKRLAESSVDLNLKLMCWRLVPTLDLDKVVSVKCLLLGAGTLGCNVARTLM
GWGVRHITFVDNAKISYSNPVVRQPLYEFEDCLGGGPKALAAADRLQKIFPGVNARGFNMSIPMPGHPVNFSSVT
LEQARRDVEQLEQLIESHDVVFLMMDTRESRWLPAVIAASKRKLVINAAALGFDTFVVMRHGLKKPKQQAGDLCP
NHPVASADLLGSSLFANIPGYKLCYFCNDVVAPGDSTRDRTLDDQCTVSRPGLAVIAGALAVELMVSVLQHPEG
GYAIASSDDRMNEPPTSLGLVPHQIRGFLSRFDNVLFVSLAFDKCTACSSKVLDDQYEREGFNFLAKVFNSSHSF
LEDLTGLTLHQETQAAEIWMSDDETI

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FIGURE 1064

TCTTCCTCGGCGCTGCCTACGGAGGTGGCAGCCATCTCCTTCTCGGCATCATGGCCGCCCTCAGACCCCTTGGA
AGCCCAAGATCGTCAAAAAGAGAACCAAGAAGTTTCATCCGGCACCAGTCAGACCGATATGTCAAAATTAAGCGTA
ACTGGCGGAAACCCAGAGGCATTGACAAACAGGGTTCGTAGAAGATTCAAGGGCCAGATCTTGATGCCCAACATTG
GTTATGGAAGCAACAAAAAACAAGCACATGCTGCCAGTGGCTTCCGGAAGTTCCGTGTCACACGTC AAGG
AGCTGGAAGTGCTGCTGATGTGCAACAAATCTTACTGTGCCGAGATCGCTCACAAATGTTTCCTCCAAGAACC
AAGCCATCGTGGAAGAGCTGCCCAACTGGCCATCAGAGTCACCAACCCCAATGCCAGGCTGCGCAGTGAAGAAA
ATGAGTAGCGAGCTCATGTGCACGTTTTCTGTTAAATAAATGAAAACTGCCATCTGGCATCTTCCTTC

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FIGURE 1065

MAALRPLVKPKIVKKRTKKFIRHQSDRYVKIKRNWRKPRGIDNRVRRRFKGQILMPNIGYGSNKKTKHMLPSGFR
KFLVHNVKELEVLLMCNKSYPACIAHNVSSKNRKAIVERAAQLAIRVTNPNAIRLRSEENE

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FIGURE 1066

TCGGAGGAGCCAGCCGAAATCCTGCCGCTGCCCGGACGAGGAGGAGGAGGAGGAAGAGGGGATGAGCAGGGG
CTGGAGGAGGAAGAAAGAGTGGATCCCCGGATCCAGGGAGAACTGGAGAAGTTAAATCAGTCCACGGATGATATC
AACAGACGGGAGACTGAACCTTGAGGATGCTCGTCAGAAGTTCGGCTCTGTTCTGGTTGAAGCAACGGTGAAACTG
GATGAACCTGGTGAAGAAAAATGGCAAAAGCTGTGGAAGACTCCAAGCCCTACTGGGAGGCGACGAGGGGTGGCGAGG
CAGGCTCAGCTGGAAAGCTCAGAAAGCCACGCAGGACTTCAGAGGGGCCACAGAGGTGCTCCGTGCCCGCAAGGAG
ACCATCTCCCTGGCCGAGCAGCGGCTGCTGGAGGATGACAAGCGGCAGTTCCAGTCCCGCTGGCAGGAGATGCTG
AATCAGCCCACTCAGAGGGTTCATGGAGGCGGAGCAGACCAAGACGAGGAGCGAGCTGGTGCATAAGGAGACGGCA
GCCAGGTACAATGCCGCCATGGGCCGATGCGACAGCTGGAGAAGAACTCAAGAGAGCCATCAACAAGTCCAAG
CCTTATTTTGAACCTCAAGGCAAAAGTACTATGTGCAGCTCGAGCAACTGAAAAGACTGTGGATGACCTGCAGGGC
AAACTGACCTGGCAAAAGGCGAGTACAAGATGGCCCTGAAGAACCTGGAGATGATCTCAGATGAGATCCACGAG
CGCGCGCGCTCCAGTGCCATGGGGCCTCGGGGATGCGGTGTTGGTGCTGAGGGCAGCAGCACATCTGTGGAGGAT
CTGCGAGGGAGCAAACTGAGCCTGATGCCATTTCTGTGGCCCTGGAGGCCCTTTGAAGATGACAGCTGTAGCAAC
TTTGTTGCTGAAGATGACTCGGAAACCCAGTCCGTGTCCAGCTTTAGTTCAGGACCAACAAGCCCGTCTGAGATG
CCTGACCAGTCCCTGCGGTTGTGAGGCCCTGGCAGCCTGGATCTGCCACGCCCTGTGTCCCTGTCAGAGTTTGGG
ATGATGTTCCCACTGTTGGGCCCTCGAAGTGAATGCAGCGGGGCCCTCCTCCCTGAATGTGAAGTAGAACGAGGA
GACAGGGCAGAAGGGGCGAGAATAAAACAAGTGACAAGCCAAACAACCCGGGCCCTCAGCAGTAGCAGTGGC
AGTGGTGGCAGCAGTAAGAGCCAAAGCAGCACCTCCCTGAGGGCCAGGCCTTGAGAGAACCGGATGAAGAGCTC
TCCCTACAGTGCTCAAAGGGAAGAGATGGAATTATTGCTGACATAAAATGGTGCAGATGGCTGATTCATCTCCTG
GGCCCTGGCCGATGTGCATATCAACATTTATACATGGAACCTGGAGAACATTGTGCGCAATAATCATTAAATATATG
CAGAACTTTACAGCTCTACTCTAACTGCTCTAATGAAGTTTCAGTGACCTTGAGGGCTAAAGATTGTTCTTCTG
GGTAAGAGCTCTTGGGCTGTTTTTACAGACAGAGTCTTGTGTTGGGTAGACTGTGACTAGGTTACAGCCCTTT
GTGGAACATTCCGTATAACGGCATTGTGGAAGCAATAACTAGTTCCTATGAAAGAACAGAGCTGGGAAGATGGC
TGGGAAGCCAGGGCCAAAGTGGGGGCAACAGCTTGCTTCTCTTTCTCTCTCACCCCTCAGTTTGTATGGGAAAAATG
GAGATGTCTCTCCACTTTATCCACGATATCTAAATGAAAAAGAAAGAAAAACCCACACACAAGCAAAAGCAAACTCA
AGTATTAAAGGACACATATTTTGAACCCAGTGGAGGCTTAAAAAAGAAAAATCCAGAAACACAAATTCATTTTAC
CACCTCTGGTGTTTCAGAGGGGCTTTTAAAAAAGCGTGTATGCTGGGATACCCATTAAAAACCATTTTCTAGAAGG
CTACCATGAGCTGCACCTTTTGGGGTGGGAAAGGTGAATGCCAGTGGGATGCGGGGGATGAGGATAGGAGGGA
CTTAGAGAAGGGGATTTGGGCTGGGGGGAAGAGTTCTACAGCATAAGCCCTTATCTGCCAGCCAGGGGAT
TATCTTAAGAGAAGTGATGTGAAGAATGGTGCCACTGTTATTAGATTGACAAGATGTAAATTTCTCTGTAGGT
GTAACTTTAAAAATAAATGAAATATTTAAGGGTTATGCTGCATAGTATTCCTTAGAGGAACAGTTCTTTAA
AGTTAGGAAAGGGAGTAGGCAGGCATGTGTGGCAAGGCTGTAAATAGTAGTTAAGTGTGAAGCTGCTTTCTT
TTAACGTTTTTCATGGTAATGCATATTTAGAGCAGTGTATTTTGTCTTGTTAAGAAAAATTTAGCATTTCATAAG
AAAAAAGCAACCTCTTTCAACTGTGTAATCTGTGCAGCCCTGTATATTTAGTCATTGTGAATCTCTTCATA
CAATAGTGACTCTCTTTTTCAGCTGATACAGTATCTTAATTACAAGGTTATTTGTACTGTGCTTAATACACTAAG
TGTAATAAAACGGCTTGAG

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FIGURE 1067

MEQGLEEEEEVDPRIQGELEKLNQSTDDINRRETELEDARQKFRSVLVEATVKLDELVKKIGKAVEDSKPYWEAR
RVARQAQLEAQKATQDFQRATEVLRRAKETISLAEQRLLDDKRQFDSAWQEMLNHATQRVMEAEQTKTRSELVH
KETAARYNAAMGRMRQLEKKLKRAINKSKPYFELKAKYVYVLEQLKKTVDLQAKLTLAKGEYKMAKNLEMISD
EIHERRSSAMGPRGCGVGAEGSSTSVEDLPGSKPEPDAISVASEAFEDDSCSNFVSEDDSETQSVSSFSSGPTS
PSEMPDQFPVVRPGSLDLPSPVLSLSEFGMMFPVLGPRSECSGASSPECEVERGDRAEAGENKTSDKANNRGLS
SSSGSGGSSKSQSSTSPGQALENRMKQLSLQCSKGRDGIADIKMVQIG

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FIGURE 1068

CATGGCAAAAGAACTCCCGGATAATCCGAATTCGTGGTCTCAGAAATTGGTTAGGGTTGTTTCGCGGTTCTTCC
CGTATTCTGCCTCCGAGGCCAGTGGGGCTGGCTGTGGGGTGAGTGCCTGGCCCTAGCCCTGCAGCCCCCTGT
GCTGTTTGAGGCGTGAACTCACCTCAGGAAATGTATCTGATCCATTAGCGTGGATTCAATTATTGGTGATGG
AGAACTTCAGCTGTGTTAAGTGTACCGTCAGTTTCAGAGATGGCTTCTTTGCAAGGAAAGGGCTGCAGGCCAA
GGATTCTCACCTCTGAAGAAAGAGGAGAACTGAAAAGAGACCAAACTTTGGTGTCTGATTTTAAACAGCAGAAAT
TGGAAACAAGAGGCTCAGAAAAATTGGGATCTTTTTACAAAAGAAATAGCACTAATTTCTTCAAAGACAGACCT
GGACCACAGAGAGTTTGAGGAGCTAAGATCATGTAGAGAGTTTGAAGATCAAAAGTTAAACAATGCTTTGAAGCTG
GCTGTGGGGTTGGAACCTGTTTATCCCACTTTTAGAAGAAGATCCGAATATCTTTGCCATGCTGTGATTTTT
CTCCAAGGCCATTGAATATGTTAAGCAAAATCCTTTATATGATACAGAAAGATGCAAGGTATTCAGTGTGATC
TGACTAAAGATGATCTTCTGGATCATGTACCGCCAGAGTCTGTGGATGTTGTTATGTTGATATTTGTGCTGTCAG
CTGTTCACTCTGATAAGATGCACCTTGCTTTACAAAACATTTACAAGGTATTAACCAGGCCAAAAGTGTCTTGT
TTCGTGACTACGGACTGTATGATCATGCCATGCTTAGGTTTAAAGCCAGCAGCAAACTTGGAGAAAACCTTTTATG
TTAGACAAGATGGGACCAGATCATATTTTTTACTGATGACTTCCTGGCTCAGCTCTTTATGGACACAGGTTATG
AAGAAGTGGTAAACGAGTATGTGTTTCGAGAGACGGTGAATAAAAAGAAAGGCCCTGTGTGTCCAAAGAGTTTTC
TTCAGAGCAAATTTCTAAGCCCTCCTAAGAACCATCTCCTGTGGTCTGGGCCCTGGATCCTAAGTCTTGACCTT
TCATGAGGTTGGCATTATACCTTCCCTTGAAGAGGAAAATTTAAATCACTCTTTCGTCTGGGTGCGGTGGCTC
ATGCTGTAAATCCAGCACTTCGGGAGGCCGAGGTTGGGGATCATCTGAGGTCAGGAGTTTGAGACCAAGCCTGG
CCAACATGGTGAGACCCATCTCTACTAAAAATACAAAAAATTAGCTGGGCATAGTGGCAGTGCTGTAAATCC
CAGCTACTCAGGAGGCTGAGGCAAGAGAATCGCTTGAACCAAGAGGCCGAGAGCTGCAGTGAGCCAAAGATCATGC
CATTGCACTCCAGCCTGGCGCAGAGAGTGAGACCCCTGTTTCAATAAATAAAATCACTCTTTTACTTTATAT
ATTTTTTGAGACAGGATCTTGTGTACGAGGCTGGAGTGCGTGGTGTGTGATCACAGCTCATTTGAGCCTCGA
CTCCCCCTGGGCTCAAGCAGTCTCTCGCTCAGCCTCCTGAGTAGCTAGGACTACAGGTGTAAAGCCACCATGCC
TGCCCTTAAATTTTTTAAATGAGCATGTACAGTAGTCCCGCTTTATCCATGGTTTCACTTACCACAATTTCAAT
TACCTGTTTTCAACTGCAGTCAGTTACTTTTCTTAAGATATTTGAGGGTTATAGGCTCATGCCTATAACCCAG
CACTTTGAGAGGCCAAGGCCAGCAGATCCCTTGAGCCAGGAGTTCAAGACCAGTGTGGGCAACATGGTGAACAT
CTGTCTCTACAGAAAATACAAAATTAGCCAAATGTGGTGGCATGTGCTGTAGTCCAG

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FIGURE 1069

MASLQRKGLQARILTSEEEKLRDQTLVSDFKQQKLEQEAQKNWDLFYKRNSTNFFKDRHWTTREFEELRSCRE
FEDQKLTMLEAGCGVGNCLFPILLEEDPNIFAYACDFSPRAIEYVKQNPPLYDTERCKVFQCDLTKDDLLDHVPPES
VDVVMLIFVLSAVHPDKMHLVLQNIYKVLKPGKSVLFRDYGLYDHAMLRFKASSKLGENFYVRQDGTRSYFFTD
FLAQLFMDTGYEEVVNEYVFRETVNKKEGLCVPRVFLQSKFLKPPKNPSPVVLGLDPKS

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FIGURE 1070A

GACAAATGAAAAGCGAACCCCATTTGCACGCCGACGCTTACCTTGGAGATGSCAGAAATCATTGAACTTCTTATTTA
TCTGGAGCTAGAGTTAATGCGCAAGACAGCAAAATGGTGTGACACCTTTACACAGAGCAGCTTGCATCTTTGTATGAG
GAAGCAGTTCAGGTAACCTTTGAAGCATTTCTGCAGATGTTAATGCTCGAGACAAAATTTGGCAAAACCCCTTTACAT
ATAGCTGCTGCTAAATAAGCTGTAAAGTGTGCTGAAGCTTTGGTACCTCTTCTGAGTAAATGAAACGTAATCTGAT
CGAGCAGGGAGGAGCTGCATTACATCATGACAGCTTTCAGTGGACATGGTGAAGTGCCTCAAACTACTCTTGTCTAGA
GGTGCCAATATTAATGCTTTTGACAAAGAAAGATAGCGGTGCTATCCATTGGGACAGCATATATGGGTACATTTGAA
GTAGTGAATATGCTTGTGTCGATGGAGCTGAAGTGACATGCAAGGATAAAAAGCTTTATACACCTCTTCTACGCA
CGAGCCTCTAGTGGAAATGATCAGCGTAGTCAAGTACCTTCTAGATCTTGGAGTTGATATGAATGAACCAATGCT
TATGGAATACACCTCTTCATGTAGCTGCTATATATGGACAAGATGTTGTAGTGAATGAACCTTATAGACTGTGGT
GCTATTGTGAATCAAAAGAAATGAAAAGGATTACTCCTTGTGACCTTGTCTGCTGCATCAACACATGGAGCATTG
TGTTTAGAGCTTCTGATTGGCAATGGGGCCGATGTCAATATGAAGATAAAGATGGGAAAACCCCATACACATG
ACTGCTCTCCACGGTAGATTCTCCCGATCACAACCATTTATCCAGAGTGGAGCTGTAATGCAGCTGTGAGGATAAG
AATGGAATACCCCTTTGCACATAGCAGCAGCGGTATGGCCATGAGCTGCTGATCAACACTCTTATTACAAGTGGT
GCTGACACTGCAAGCGTGGCATACATGGAATGTTCCCTCCATTGGGAGCCCTTAAGCGGCTTTTCAGATTGC
TGCAGAAAACCTTCTTCTCAGGATTTGATATAGATACCCAGATGATTTTGGCAGGACTTGTCTACATGACGCT
GCAGCTGGAGGGAATTTGGAGTGCTTAAACCTTCTGCTGAATCTGGTGAGACTTTTAAATAAAGGACAAATTT
GGGAGATCTCCACTGCACTACGCTGCTGCCAACTGCAATTACCAGTGCCTGTTTGTCTTGTGGGATCAGGAGCA
AGTGTGAATGACCTTGTGATAAGAGGCTGCACACCCCTGCACTATGCACTACATCAGACAGATGCGGAGTGC
CTGGAATACTTATTAAGAAACGATGCAAAATCCAGGATCCGTGATAAGCAAGGATACAAACGAGTTCATTATTC
GCTGCTTATGCTCAGCTCTATGCTTTCAGCTGATTGCAAGTGAACCTCTCTAGATGTTTTAATGGAAACCTCA
GGAACAGACATGCTGATGATACAGATAAGACAGCAAAATGAAGCCCTTTACACTTGGCTGCCTATCATGCTGC
CATCAAGCACTGGAAGTGTGGGTACAGTCTTGTGTAGATCTTGTGTCAGAAATAGTAGTGGAAAGAACCCCTTA
GATCTTGCAGCTTTAAGGGCCATGTTGAATGTGGATGTACTCATTATACAGGAGCCCTCAATCTTAGTAA
GATTACATTTTGAAGAGGACACCTATTCTGCAGCAGCAACAAATGGTCTTACAGAACTTACCGCTATTAAAT
GGAAATGCGAAGCACAGAAATGCAAGTGGATATTCAAGATGGAATGGAACAGCGCCTCTGATGCTATCTGTCTC
AACGGGCGACAGACTGTGTTTACTCATTGCTGAAACAAAGGAGCAAAATGTAGATGCCAAAGATAAGTGGGGAAGG
ACAGCGTTGCAATAGAGGGGCGAGTTACAGGCCATGAAGAAATGTGATAGTGCATTACTTCAACATGGTCTAAGTGC
TTACTTGGGATAGCAGGGGGCCGAGGCCCTATACACCTGTCTGCTGCCTGTGGACACATTGGTGTCTTGGAGCC
CTTTTGCAGTCAGCAGCATCTATGATGCAAAATCCAGCCACAGCAGCAATCTGATGATACGGCACTTCACTGG
GCTTGTCTCAATGGTCACGAGACATGTGTAGAACTGCTTTTAGAACAGGAAGTTTTCAGAAAACCGGAAGAAAT
GCTTTTGTAGCTTGCATTGCAATGTGCGGTGATAAATGCAACGAAGGTGCTGCTGAGATGTTAATGATACATTAGT
GCCAGCATTTGAAACGCCACAGCTTCAAAGGAAGAACTCTTCCATGCGAGCCGCTTTCAGACCATGTAGAG
TGTTTACAGCTGCTGCTCAGCCATAATGCTCAAGTCAATCTTGTGGACTCTACAGGAAAACACCTCTTATGATG
GCTGCAGAAAATGCAACAAACAAATACAGTTGAGATGCTGTTAGCAGTGTGTTAGCAGACTGACTTTACAGAT
AACAGTAAAAATACTGCCCTCCATTGGCTTGTAGCAAGGGTCATGAACTAGTGCTTTTAAATCTGGAAGAG
ATAACAGATAGAAACCTCATCAATGCAACCAACGCGCCCTTGCAACACCTCTGCAATGTTGCTGCCGAAATGGG
CTAACAACTTGGTGGTTTGAAGACTTTTGGGAAAAGGAGCAAGTGTGCTGACATAGATAAAGTGGCTATACCCCA
GCTTTGGGCTGTGCTCCCAATTAAGATGTGGCTGATTGCTTGGCTGCTCATTTTGGCCACCATGATGCTGTCTCA
TCAAGTAGTCTTTTATCATCTTCAATGATGCTTAAACGTTATACCAACCAATGATGTCAGAAATCTTGTGGAAATGTTT
GAAGCTTTGCCCATCATGAGGAATGAACCTAGCTCCTATTGCGAGTTTCAATAACATTTGGAGGGGAGACGAGGATAC
TTATACACTGAGCTGGATGAGCTCAACGACTCCGATTCTGAGACCTACTGAAGGCTGAGGAGGAGGGGATCTC
ACAGTAAGGCTTCAACCTGTGCTTTTTCAGGAAAAGGCACTTTGATATTCAGTGAGAAATCAACCTAAGAGGA
AAGATCCCAAGTGAAGCAATGTTAAGAGATCTGATGGCATTAGGAGGAAGAGTTTAAAGGCAAGTTTACAA
AGGAACCTTCTAGAATCTTGAATAGACCTGACTGAGGAAAACACATTTGATGTCAGAAATCTTGTGGAAATGTTT
AATTTGGTTTTCAGTGGCCAGGAAACAAATGGGGACACTGTGCACTCTAACCTGCTTACACAGCAACATATTGT
AACAGAGAATAAAGACACTAGATTTAAATTTATCAATAAAATTAACCTAAATTTAAAGGCAACATAAAGTTT
GGTACAGTAGGCATTTATGTCACAGCAAAATGCAAAAGGACCAATAACTGAAAGGTTTTTAAATAAATGCCA
TTTTGTGGAACCTGGAGTAGATTAATGAACATTACCTAAACCAACTGCAATATTCTCGAAATGAAGCTGAG

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FIGURE 1070B

ATTTGGTTTTAAATGTTGAGTTTTTTTGGGTTTTGTTTTTTTTTAAAGAAAACATCTGAAAGCCTTCCAATGCTG
TATTAACCATGAGAGAAAGCAGATGTATTTTACATTTTTTCTTTTACAGAACTATTTCAAATTTCCAATTTT
TATACTATTAGAATTAAAAACAGCTGACTGGGTGCAATACGGGTGAAAATACTTGTGACATAGACATTGAGATG
GATTGGGGTCAGGCTGTTGCCCTGTTTTGAATGGTTTGGGTTTAAATAGTACTATTTTGTGTTGAAATGTAA
GAATTTCCCTAGAAAAAATTCATGAAATCAAAAAGTAGACTATTTCACCTTATTCAGCTAAGTGGTCCCTGGGGC
ATGGAGTCTTCAACCTCTCTATGAATGGCACACCTTAGTCACCTATGTTACTTTTGTGTCGCCACCATGGGTTGG
GGGATTTTTTGTATTCTGATCTATGAGTTTTGAAAAAGTGAATAATCAAAAGGAAAAATAATCCCTGTGTGTT
ATAAATTAAGCATCACTAAAGTCTCTGAAAGGCATTTCTGTATTGGGCAAGATTTAAATATCAAAAGCCTTAGG
TCCTATTTCATATTTAAAGTAGCATGTTTGTAACTGTTACTATTGGAGAGAGAAGCAGTTGCCTGCCAAATTGA
AGACTACCTTTCAAATAGCAAAAGAGAGAGAGAAGGCTGATATTTCCGGCTTTTAAATAAAGATTTGTGTGTTCT
GCTTTTACTGTAACGTGCACTTTCCAGTGAAAATGATTTCATATACATTGAGGGTCTTACAGGTATGGGTAAAG
TTCTATAAATGCAACAAAATGATACCCAATTTTCATTTATCCTTTTGTATTGTGAACTGGAACTTTATGAC
ATTGTAAATTATCAGCTGGTTTTTCTGAATATAAAGTGTGAAAACACAGAAGCAGTATTGATCTATTGATAAT
TTTGTGGGTTTTTGAAGAATTAATGAGCATGTACATAGAAATAGTGACTGCTTGAATACTGTATTTACTTGCAC
TCCTTTCAGTACATCAAGATTCCTGTATATTTTAGAGTATAATAAACACAGATGTGAGTTGTATTTAATGAATA
TGATTTTGTATCTGTGCATATTATCTACAAATCTATAAAGTTTCTAGGGCATTGACTACTAGATTTTAAACATT
TTTCTAAATATTTACAGAAATATAAATCTAATCCCCATCTTTCTTTATAATATAAAGAAGTCATAATGAAC
CCTTCTCAATATTAGTAGTAGGAAGGTGAATATGCATTTAATGACAGTGGACTACATTTTCTATTGTACCTTT
TGAAAAAATAAATCAAGCAGATTTCTAAAGTATACATATGTTGTCCTTCTCTTTCTTTTAGGAATTCCTCT
CTGAATTTCCCTGAGGGAATTTCTGAATCTCAGAATTGAAAGAGACCTGAGGTTTCATCCAGTCTCTAACCTCT
AACAAATGCAGGAGTCCCTCTCAAGGGGTGATCTTCCACCTTGAACACTTCCAAGTGACTCTACCTCACCAAG
CAGTCCATTTCAGTTGTTGAGCAGCTCTAAGTCTTAGAAAGGCTTCTTATAGTGGAGTTGAAGCTCCCTCCCGG
TAACCTCTGCTTTGGGCTGGGCTGTCTCCCAAGAGAACCCTGAGAATGTTGGAAGGATGAATCTCGCACATT
CTGCCATGTCTTCTCTTTACAGGCTGTTGACTTCTCTGCTGAAGTGATTTCCAGAAGGACTCATTGACACAC
TATTAGATTTACCACATCTAATGAATCCAAGGTGTAGCTATAAAGTGACAAGCTGTTTTAATTTTACACATAC
ACCAGAATCTCTATCTGCACTACTATATGTAATGATGCTGTACCAAAACATTAAGGTAGTCTTGTGCAAT
GCCACCCCACTAAGAAAATCTATTACTTTTGTAAATCCATCTGTGAGAGTCTGCCCCCAGCTTAACCACTT
CCTTTGGTCTGCACCCAATGAAGGGAACCCCAAGTACTGTCTCAATGGTATTGAACTAGC

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FIGURE 1071

MVKLLSRGANINAFDKKDRRAIHWAAYMGHIEVVKLLVSHGA EVTCKDKKSYTPLHAAA SSGMISVVKYLLDLG
VDMNEPNAYGNTPLHVACYNGQDVVVELIDCGAIVNQKNEKGFTPLHFAAASTHGALCELLVGN GADVNMKSK
DGKTP LHMTALHGRFSRSQTIIQSGAVIDCEDKNGNTPLHIAARYGHELLINTLITSGADTAKRGIHGMFPLHLA
ALSGFSDCCRKLSSGFDIDTPDDFGRTCLHAAAAGGNLECLNLLNTGADFNKKDKFGRSPLHYAANCNYQCL
FALVGSGASVNDLDERGCTPLHYAATSDTDGKCLEYLLRNDANPGIRDKQGYNAVHYSAAYGHRCLQLIASETP
LDVLMETSGTMDLSDDNRATISPLHLAAYHGHHALEVLVQSLLDLVDRNSSGRTPLDLAAFKGHVECDVVLIN
QGASILVKDYILKRTPIHAAATNGHSECLRLLI GNAEPQNAVDIQDGNQTPMLSVLNGHTDCVYSLLNKGAVN
DAKDKWGRTALHRGAVTGHEECVDALLQHGA KCLLRDSRGRTPIHLSAACGHI GVLGALLQSAASMDANPATADN
HGYTALHWACYNGHETCVELLLEQEVFQKTEGNAFSP LHC AIVINDNEGAEMLIDTLGASIVNATDSKGRTP LHA
AAFTDHVECLQLLLSHNAQVNSVDSTGKTP LMMAAENGQNTNIVEMLVSSASAELTLQDNSKNTALHLACSKGHET
SALLILEKITDRNLINATNAALQTP LHVAAARGLTMVVQELLGKGASVLA VDENGYPALACAPNKDVADCLALI
LATMMPVSSSSPLSSLTFNAINRYTNTISKTVSFEALPIMRNEPSSYCSFN NIGQEYLYTDVDELNDSDSETY

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[illegible]

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FIGURE 1073

MGCGLNKLKREKRPGNISTLKRQVETKIDVSYEYRFLFTTLSAAELPGSSAVRLASLRDLPAQLLELYQQ
GFSLAALHPFVQPTHEREKTPLEHIFRAILIKKTDERSQKTDLHNEGYLELDCSSSLDHPTDQKLIPEFIKKIQE
AASQGLKEFVGVIQYHSSVNSAGSSAPVSTANSTEDARDAKNARGDHASLENEKPGTGDVCSAPAGRNQSPSPSS
GPRGEVPLAKQSPSPSGEGDGGELSPQGVSKTLDGPESNPLEVHEEPLSGKMEIFTLFNKP KSHQKCRQYYPVTI
PLHVSKNQTVSGLDANWLEHMSDHFRKGGMLVNAVFLGIVNDSLHGLTDGVFIPEAVSTEDSKTIQGYDAIVV
EQWTVLEGEVQTDYVPLNLSLAAYGWQLTCVLP TPVVKTTEGSSVSTKQIVLQRPCLPQKIKKKESKFQWRFS
REEMHNRMKRSKGKLSARDKQQAENEKNLEDQSSKAGDMGNCVSGQQQEGGVSEEMKGVQEDKGEQLSPGGGL
LCGVGVEGEAVQNGPASHSRALVGICTGHSNPGEDARDGDAEEVRELSTVEEN

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FIGURE 1074

GCAATAGCAGCTAGAGTGCATCTATACCTGTGAACGAAATGATCAACTCTGTCTTTGCTATGACCTACTAGAATGT
CTGCCAGAAAGAGGATATGGTGATAAGACAGAGGCAACCACAAAGCTTCATGACATGGTAGACCAACTGGGAACAA
ATTCTCAGTGTGTCAGAGCTTTTGGAAAAACATGGACTCGAGAAACCAATTTTCATTGTTTAAAAACACTCAATCT
AGCTCAGAAGAGGCACGCAAGCTGATGGTTAGATTGACGAGGCACACTGGCCGGAAGCAGCCTCCTGTCACTGAG
TCTCATTTGGAGAACGTTGCTGCAAGACATGTTAACTATGACGACAGAAATGTATACACATGCTAGATTCTGATGCC
TGCTATGAGATATTACAGAAAAACCTTCTGTGCTCTAGTCGCCCTTGAACCAATCCACCTGGCTGGACAGATGATG
CACTGCAGTGCTTTGTTAGAAAACTCCTCCAGCTGGTATAGCCCATTAAGGGGAAACCCCACTACAGGGTCAGCTAC
GAAAAGAGTATTGCATTTGGTTTGGGCTGCCAGCAGAGAGTACTTCAATCTTCTACCAACCTCACTGATAGCTGC
ATGGATCTAGCCAGGTGCTGCTTACAACCTGATAACAGACAGACCCCTGCCATTCAAGAGGAGCTAGATCTTATC
CAAGCCGTTGGATGCTCTTGAAGAATTTGGGGTAAAGATCCTGCCCTTTGCAAGTGCATGTTGCCCTGATCGGATC
AGTCTCATCAAGGAGTGATTTTCCCAGTCCCCACATGCTATAAACCAATCCACCAAGCTTCTGGGCCCTTGCTGAG
CTGCTGAGGGTTGCAGGTTGAGAACCAGAGAAAGCGGGGACAGGTTCTAATCCTTTTATGGAGCAGGCACCTTC
GCTTCCATGACTACAAAGCAGCCAGTATGCTTGTGAGGAGCTGATGGCCACAGGTTATCTTAAAGTTGGGATG
TTTGTAGCCAGTTAGGACAATCAGAAGGTTTACAGGACTTGGCCACTGTCAGAGAGCTCATGGCTTTTGTCTTTGA
CACATTGCCCTCCTAGCAGCAATTGAACCTTCTTTTGGCAGCTAGCAGCTCTCTGACAGACAGAAATCTTTATCAAA
GAGTGAATTTCCAGATCCATCAAGAAGGAGGGGAAAAATACAGTGCTTCAACCTAGTAAAGCAGTACAG
AGGATGAAGTAGGTGTTCCAGTAGCAATTGACGTGACCTATTGCGCTGGACCCTGCTACCAACCATGAAAGTCC
TTTCCAACACCACAACCCACCAAGCGGTGCTGCAGGCCGTGAGTATGGGACAGTGGTGAAGAAGTCTTTAA
CTTACCTTCGACCCCTTCAGGGGCAAAAATGTGGTGGTGCATATCAAATCGGAACTACAGCCAATGAAGATCTAG
AGAAACCAAGGGTGCATCCTTTTATGAATCTGTCACTCTCAAATCCTTTTGTGCTGAGTCTGAAGGGACCTATG
ACACCTATCAGCATTTCCAGTGGAAAAGCTTTGCAGAAAGTATTGCTGAGAAGTGAAGAAATTGGCAGAGGCTAAAA
ATAAAGGAGAAGTATTTCCAACCACTGAAGTTCTCTTGAACCTAGCAAGTGAAGCCTTGCCAAATGACATGACCT
TGGCTCTTGCTTACCTTCTTGCTTACCACAAGTGTTAGATGCTAACCGGTGCTTTGAAAAGCAGTCCCCCTCTG
CATTATCTCTCCAGCTGGCAGCGTATTACTATAGCCCTCCAGATCTATGCCGATTTGGCCCCATGTTTCAGGGACA
AGTGCCATCTCTTTACAGGGCTGATCCCAAAGAACTAATCAAGTAGGTACCAAGGCATGTGACTCGACATGAGC
ACGAAGCCTGGCCTGAAGACCTTATTCTACTGACCAAGCAGTTACACTGCTCAATGAAGCTCTCTGGATTTCA
CTCAGGGCGCAGATCCTTCAGGGCCTTCGGAAGGGTGTGACGTCGACGGGTTTACTGCAGATGACCAATATAAAA
GGGAACTATCCTTGGCTTGGCAGAACTCTAGAGGAAAGCGTCTACAGCATTGCTATTCTCTGGCACAACGTT
ACAGTGCTCTCCGCTGGGAGCTTTTATGACCCATTGGAGTTCTCTTACGAGCAGTGGTTTGTCCACATAG
AAATTTGAAAATAGAGCCCAAGACCTTCATCTCTTTGAGACTTTGAAGACTGATCCAGAAGCCTTTACCAAGCACA
TGGTCAAGTATATTTACCCCTACTATTGGTGGCTTTGATCAGGAAGCTGACAGTATTATTTCATCTTTGGAATA
ACTGTGCTGTGCAGATTGGGGAACTGTGCCATTAAACCGAAGAAACCCACATTGCACTGCTGAAGAAGTTTAAGG
TTGTTGCATCAGGCTCTAATTACAAAAGCTGACAGATGAAACATGAGTCTCTTGAAGCATTTGAGGCCAGTTC
TTTCAAGTCAAAATATCTTGCTATTCTTTTCCAACTTGTTCCTTCCAAATCCCTGAAAGACTGGACAGATGCTTTCCC
CAAGCTCTCTGTACACCATCTGTTTACAGAAGTTGTTCTGGAAGTGAAGCCCTCATCTCATTAACCAAGTCCAG
GCTCTTCCAGGAGTGGCTTCATGCTATGATGCTGCTGATGAAGTACTTTGATCGTCTCCACCCAGGTCAGCTCA
TCATCTGGGTAGATGACAGTTACATTTTCTCCAAAGCTGTGACCAAGCTGCTGTTGGAAGCCCGTAAAGAGATGA
CTAGAAAGGCTATTAAAGACAGTCAACATTTTATTGAGAAGCCAGGAAAGAACTCAGAAGACGAAAGCTCAAG
AAGCTAAGGATCTAAAGTTACCTATGCAGATACCTTTGAATCATCTGGAGAAATCACTTGGCCACTGGAACCC
TGAGCCACAGCTTCATCTTTCTCTGAAGAATAGTGAGCAGGAACACTGCAAAAATACAGTCACTCTATGATC
TGTCCGATCAGAAAAAGAGAACTTCATGATGAAGCTGTGGCTATTGTTTATAGTGGTCAGCCTCTAGCAATGA
TTCAGACGCTGCTAGAGTGGCAGTTGGCCCTCTTGACATCTCAACCAAGATATAGTGACAGAGTCAATCATGA
AAATAATTTCTGCATTGAG

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FIGURE 1075

GCAGTACATTGAGCTCCATAGACAGCGCCGGGCAAGTGAGAGCCGGACGGGCACTGGGCGACTCTGTGCCTC
GCTGAGGAAAAATACTAAACATGGGCAAAGGAGATCCTAAGAAGCCGAGAGGCAAAATGTCATCATATGCATTT
TTTGTGCAAACTTGTCTGGGAGGAGCATAGAAGAAGCACCCAGATGCTTCAGTCAACTTCTCAGAGTTTTCTAAG
AAGCCCGTTATGAAAAGAGAAATGAAAACCTATATCCCTCCCAAAGGGGAGACAAAAAGAAGTTC AAGGATCCCA
ATGCACCCAAAGAGGCTTCCTTCGGCCTTCTTCCTTCTGCTCTGAGTATCGCCCAAAATCAAAGGAGAACATC
CTGGCCTGTCCATTGGTGATGTTGCGAAGAACTGGGAGAGATGTGGAATAACACTGCTGCAGATGACAAGCAGC
CTTATGAAAAGAAAGGCTGCGAAGCTGAAGGAAAAATACGAAAAGGATATTGCTGCATATCGAGCTAAAGGAAAGC
CTGATGCAGCAAAAAAGGGAGTTGTCAAGGCTGAAAAAAGCAAGAAAAAGAAGGAAGAGGAGGAAGATGAGGAAG
ATGAAGAGGATGAGGAGGAGGAGGAAGATGAAGAAGATGAAGAAGAAGATGATGATGAATAAGTTGGTTGTA
GCGCAGTTTTTTTTCTTGCTATAAAGCATTAAACCCCTGTACACAATCACTCTTTTTAAAGAAAAAAATTG
AAATGTAAGGCGGTGTAAGATTTGTTTTTAACTGTACAGTGCTTTTTTTGTATAGTTAACACACTACCGAATG
TGTCTTTAGATAGCCCTGTCTTGGTGGTATTTCAATAGCCACTAACTTTGCTTGGTACAGTATGGGGTTGTAA
ATTGGCATGGAAATTTAAAGCAGGTTCTTGTTGGTGCCAGCACAAATAGTTATATATGGGGATGGTAGTTTTT
TCATCTTCAGTTGTCTCTGATGCAGCTTATACGAAATAATTGTTGTTCTGTTAACTGAATACCACCTCTGTAATTG
CAAAAAAAAAGTTGCAGCTGTTTTGTTGACATTCGAATGCTTCTAAGTAAATACAATTTTTTTATTA

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FIGURE 1076

CCTTTCCGCTGCGCGCAGCCATCAGGTAAGCCAAAGATGGGTGCATACAAGTACATCCAGGAGCTATGGAGAAAG
AAGCAGTCTGATGTATGCGCTTTCTTCTGAGGGTCCGCTGCTGGCAGTACCGCCAGCTCTCTGCTCTCCACAGG
GCTCCCCGCCCCACCGGCTGATAAAGCGCGCCGACTGGGCTACAAGGCCAAGCAAGGTTACGTTATATATAGG
ATTTCGTGTTGCGCGTGGTGGCCGAAAACGCCAGTTCCTAAGGGTGCAACTACGCCAAGCCTGTCCATCATGGT
GTTAACCAGCTAAAGTTTGTCTGAAGCCTTCAGTCCGTTGCAGAGGAGCGAGCTGGAGGCCACTGTGGGGCTCTG
AGAGTCCCTGAATCTTACTGGGTGGTGAAGATCCACATACAAATTTTTGAGGTTATCCTCATTGATCCATTTC
CATAAAGCTATCAGAGAAATCCTGACACCCAGTGGATCACCAAACCAATCCACAAGCACAGGGAGATGCGTGGG
CTGACATCTGCAGGCCGAAAAGCGCTGGCCCTTGGAAAGGGCCACAAGTTCACCACTATTGGTGGCTCTCGC
CGGGCAGCTTGGAGAAGGCGCAATACTCTCCAGCTCCACCCTTACCCTGTAATAAGTAAAGTTTGTAAAATTCA
TACTTAATAAACAAATTTAGGACAGTCACTGCTGCTTACAGGTGTTATTTGTCTGTTAAACTAGTCTGCAGATGT
TTCTTGAATGCTTTGTCAAATTAAGAAAGTTAAAGTGCAATAATGTTTGAAGACAATAAGTGGTGGTGTATCTTG
TTTCTAATAAGATAAACTTTTTTGTCTTTGCTTTATCTTATTAGGGAGTTGTATGTCAGTGTATAAAACATACTG
TGTGGTATAACAGGCTTAATAAAATCTTTAAAGGAGAGAACTGAACTAGCCCTGTAGATTGTCTGGTGCATG
TGATGAAACCTGCAGCTTTATCGGAGTGATGGCAATGCTCTGCTGGTTATTTCGAAGTGGCTGCGTTTTTTTTTA
GTTTGGCAGGTGTAGACTTTTTAAGTTGGGCTTTAGAAAATCTGGGTTAGCCTGAAGAAAATGGCTCAGCCTCC
ACAGTACCATTTTAAATTCACATAAAAGSTGAAAGCTCCTGGTTCAAGTGGCATTGGCTTCATGGCATTCAAGTATT
AGTGGTAAATGGTAAACACTGGTGTGTTTTGAAGTTGAATGTGCGATAAAATATTAGCCTTAAGATTGGTAAGCT
AGCAATGAATGCTAGGGTGGGAAGCTGGTGAGCCAGTGCGCCATTAGATAAAATACCTTTCAAGTGTGAGCTTAGAC
GTCAACCCATAAAATACCTAACCGTAATGCTAATTGTGATCATATTGAATCCCTTCAGTCACATTAGGGGGAAGT
AGTTGGCTATAAGTACGTATTCTTAGTCCAGTCAGTCTTAAACACATCTGGGTTACCCACTCTGTCCACTCCC
ATAGGCTACAGAAAAAGTCACAAGCGCATGGTTTCCAACCATATGTGTTTTCTGCAGTTATTTCTCTGTTGCTGG
CCAAACACCCCTAAAAATCCTTACCATTCCACAAAGTTGGACCATCACTTGTGCACCCACTTTGACTATGAGTAT
ACCACCACTTGCATTCTGTTTGCACCATGTCTTCCAGGAGACTAGACTACTGTTGTCCAGGGTCAATTTGAGT
GTAAAGAAAAATGTAGACAAGGAATTGCCCAATTTAAATTCTGACTTTGCTGACTTAATTTAAATGCTCGTCTG
AACCATTTTCTCCTATCTTCTTAGGGGTTCAAAGACTCAGTTAATTGATTCCAGGAAGTACTCATAGCAA
GTTCATAAAAGTTCTTGAGACCTAAATTTCTTCAAAAAAAGAAAAGATCTTAAGTCATACATTTTAAATGTGT
AGAGGTTGTTCAACTGAAGGAATAATGTCTATTAACTAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAG

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FIGURE 1077

MGAYKYIQELWRKKQSDVMRFLLRVRCWQYRQLSALHRAPRPTRPDKARRLGKAKQGYVIYRIRVRRGGGRKRPV
PKGATYGKPVHHGVNQLKFARSLQSVAEERAGRHCALRVLNSYWVGEDSTYKFFEVLIDPFHKAIRRNPDQW
ITKPVHKKHREMRGLTSAGRKSRLGKGKHFHETIGGSRRAAWRRNTLQLHRYR

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FIGURE 1078

GTGACAGAAGTAGTAGGAAGTGAGCTGTTTCAGAGGCAGGAGGGTCTATTCTTTGCCAAAGGGGGGACCAGAATTC
CCCCATGCGAGCTGTTTGAGGACTGGGATGCCAGAAACGCGAGCGATCCGAGCAGGGTTTGTCTGGGCACCGTCG
GGTAGGATCCGGAACGCATTCCGAAGGCGTTTTTGCAGCAATTACTTGAAGGAGAACTTGGGATCTTTCTGGG
AACCCCCGCCCCGGCTGGATTGGCCGAGCAAGCCTGGAATATGTAATGATCATTGGATCAATTACAGGGCTT
TTAGCTGGCTTGTCTGCATAATTATGATTTCGGGGCTGGGAAAAAGCAACAGCCTACGTGCCAAAAAAGGGG
CAGAGTTTGTAGGAGTTGGGTGGACTTTTCTATGCCATTTGCCCTCCACACCTTAGAGGATAAGCACTTTGCAGAC
ATTCAGTGCAAGGGAGATCATGTTTGACTGTATGATGTTCTGTCTGAGTCTCTGGGCAAACTCCTGGATTCTTA
CACTGCGAGTCCGCTTCTCTGCATGCTCCAGGAGAAAGCTCTCAAAGCATGCTTCAGTGGATTGACCCAAACCGA
ATTGGCAGCATGGGCACACTGCTCAATCAATTGAAACACAGAGCACCAGCTCTGAGGAACCTCGTCCCAAGCCCCC
ATCTCCACTTCTCCCCCTCGAGTGTACAAACCTGCTCTGCTGCCAGGACAAATCATCAGGGTACCACATATGG
GGTCAGCGCCTGTGAGGGATGTAAGGGCTTTTTCCGAGAAGTATTGAGAAGAAATATGATTACACTTGTCAACG
AGATAAAGAACTGTGTTATTAATAAAGTCACCAAGAAATCGATGCCAATATCTGCTGACTCCAGAAGTGCTTTGAAGT
GGGAATGTCCAAAGAATCTGTCAGGAATGACAGGAACAAGAAAAAGGAGACTTCGAAGCAAGAATGACACAGA
GAGCTATGAAATGACAGCTGAGTTGGACGATCTCACAGAGAAGATCCGAAAAGCTCACAGGAAACTTTCCCTTC
ACTCTGCCAGCTGGGTAATACACACAGCAATTCAGTGCTGACCATCGATCCGACTGGACCTGCGGCTCTGGGA
CAAAATTCAGTAACCTGGCCCAAGTGCATTATTAAGATCGTGGAGTTTGCTAAACAGCTGCGGCTGGTTTCACTGG
CTTGACCATCGCAGACCAAAATACCCTGCTGAAGCGCGCTGCTGAGCATCTCTGATTCTTAGAATTTGCACCAG
GTATACCCAGAACAAGACACCATGACTTTCTCAGACGGCCTTACCCTAAATCGAACTCAGATGCACAATGCTGG
ATTTGGTCTCTGACTGACCTTGTGTTACCTTTGCCAACAGCTCCTGCCCTTTGGAATGGATGACACAGAAAC
AGGCTTCTCAGTGCCATCTGCTTAATCTGTGGAGACCGCCAGGACCTTGAGGAACCGCAAAAGTAGATAAGCT
ACAAGAACCATTGCTGGAAAGCAATAAAATTTATATCAGAAAAAGACGACCCAGCAAGCCTCACATGTTTCCAAA
GATCTTAAATGAAAATCAGAGATCTCCGTAGCATCAGTGCTAAAGGTGCAGAGCGTGTAATTACCTGAAAATGGA
AATTCCTGGATCAATGCCACCTCTCATTCAAGAAATGCTGGAGAATTTCTGAAGGACATGAACCTTTGACCCCAAG
TTCAAGTGGGAACACAGCAGAGACAGTCTTAGCATCTCACCCAGCTCAGTGGAAAAACAGTGGGGTCAGTCAGTC
ACCACTCGTGCAATAGACATTTTCTAGCTACTTCAAACATTTCCCAAGTACCTTCAGTTCAGGATTTAAAAATGC
AAGAAAAACATTTTACTGCTGCTTAGTTTTTGGACTGAAAAGATATTAAGACTCAAGAAGGACCAAGAAGTTT
TCATATGTATCAATATATATACTCCCTCACTGTGTAACCTTACCTAGAAATACAACTTTTCCAATTTTAAAAATC
AGCCATTTTATGCAACCAAGAACTAGTTAAAAAGCTCTTATTTCTCTTTGAACACTCAAGATTGTCATGGCAAG
ACCCAGTCAAAATGATTTACCCCTGGTTAAGTTTCTGAAGACTTGTACATACAGAAAGTATGGCTCTGTTCTTCT
TATACGTGATGTTTGGTGCTTCTCTTTTGTCTTGATATCAAAATAACCATGACACCAGAGTTATGAAATAGAC
TACTGTACAGCTCTACCTAGGTTCAAAAAGATAACTGTCTTGCTTTTATGGAATAGTACACATCAAGTAAAGG
AAACAGGACTATTGACAGGACTATTGTACAGTATGACAAGATAAGGCTGAAGATATTTCACTTTAGTTAGTATGG
AAGCTTGCTTTTGCTCTTTCTGATGCTCTCAAACGTCACTTTTATTTCAATGTTGCCAGTAAAGATATACAAAT
TCCCTGCACTAGCAGAAGAGAATCTGTATCAGTGTAACTGCCAGTTCAGTATCAATGATCAATTTGTTCAAT
GTTAATGTCACCTTTAAATTAAGTGGTTTATTACTTGTTTAAATGACATAACTACACAGTTAGTTAAAAAAAT
TTTTTCAGTAATGATAGCTTCCAAGGCAGAAACACTTTTCAGTGTTAAGTTTTTGTGTTTACTTGTTTCAAGCCA
TTAGGAACTTTTATGGGATATTTAGCAGGCTGCTTACCACCTGGACCATGTAACCTAGTGCTGCTTCTGATT
CATGCTGATATTTGGGATTTTTTTTCCAGCCTTCTTGATGCCAAGGGCTAATTAATATTAACAACTCCCAAG
AAACAGCATAAGATCTGCCTCTCTTGACCTTGTTCAATCACTATGAAGCAGAGTGAAGCTGTGTTAGTGGT
TAACAGATACAAGTGCAGTTTCTTAGTTCTCATTTAAGCACTAGTGGAAATTTTTTTTTTGTATATATAGCAA
GTCTGTGATGACTTTTCACTGGCTCTGTTTGTACATTGAGATTGTTTGTAAACAAATGCTTTCTATGTTCATATA
CTGTTTACCTTTTTTCATGGAGCTCTCCTGGCAAGAATAAAATATATTATTTT

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FIGURE 1079A

ATGCGCCAAAGTCGGGTGGCTGCGCGCGGGAGCCCGCGCTGGCGCGCGCAACGGGGGCACTGACCTGGGTGAACAAT
GCTGCAAAAAGAGAGAGTCAGAAACTGCCAACAAAATGATTCTTCAAAGAAATGTGCTGTTGAGAGAGTGAT
CAGAAGAAAGACACAACCTTGAACCACTTCTTCGTCTCGATACATATATTTGGGTGAGTGGAGCCAGTGGACGAG
TTGATGTGGGTGATGATGAAGATGTAGGAATGAAATGCAGGGAGGTTACCTTTTGTCAGGTTTATACAGATC
TTTGATGAAATTTTGGTTAAATGCTGCTGACAAATAAACAGAGGGATAAGAATGACTTGTATTAAGTTTCTATT
GATCCTGAATCTAACTATAACCAATTGGAAATAATGGGAAAGGCATTCCAGTAGAACAACAGGTAGAGAAA
GTTTATGTTCTCGCTTTAATTTTGGACAGCTTTTAACATCCAGTAACTATGATGATGATGAGAAAAAGTTTACA
GGTGGTCGTAATGGTTATGGTGCAAAACTTTGTAATATTTTCAGTACAAAGTTTACAGTAGAACAGCTTGCAAA
GAATACAAAACACAGTTTAAAGCAGACATGGATGAATAATATGATGAAGACTTCTGAAGCCAAAATTAACATTTT
GATGGTGAAGATTACACATGCATAACATTTCAACCCAGATCTGTCCAAATTTAAGATGGAAGAACTTGACAAGGAT
ATTGTGGCCCTCATGACTAGAAGGGCATATGATTGGCTGGTTCGTAGAGGGGTCAAGGTCTATGTTTAAATGGA
AAGAAATGGCTGTAAATGGATTTCCGAGTTATGTAGATCTTTATGTGAAGACAAAATTTGGATGAACATGGGGTG
GCCCTGAAAGTTTATTCATGAGCTTGGCAATGAAAGATGGGATGTTTGTCTCACATTTGAGTGAAGAAAGGATTCAG
CAAAATCAGCTTTGTAAATAGTATTTGCAACTACAAAAGGTGGACGGCAGCTGGATTATGTGGTAGATCAAGTTGTT
GGTAACTGATTTGAAGTAGTTAAGAAAAAGAACAAAGCTGGTGTATCAGTGAACCAAGTTTCAAGTAAAAAACAT
ATATGGGTTTTATATTTGGCTTATTGAAATCCAACCTTTGATTCTCAGACTAAGGAAACATGACTCTGAG
CCCAAAAGTTTGTGGTCTAAATGCCAGCTGTGAGAAAAATTTTAAAGCAGCTCTAATTTGGTCATTGTAGAA
AGTATCCTGAAGTGGTGAATTTAAGGCTCAGACTCAGCTGAATAAGAAAGTGTTCATCAGTAAAAACAGTAAA
ATCAAAGGTATTCGCAACTGGATGATGCTAATGATGCTGGTGAACCAATCCCTGGAGTGTACAGTGAATATA
ACAGAGGGAGACTCTGCCAAATCACTGGCTGTGTCTGGATTAGGTGTGATTTGGACAGACAGATACAGGAGTTT
CCACTCAGGGGCAAAATCTTAATGTACGGGAAGCTTCTCATAAACAGATCATGGAATGTGAAATTAATTAAT
ATTATTAATAAGTTGGTCTACAAATATAAGAAAAAGTTACGATGATGCAGAACTCTGAAAACCTTACGCTATGGA
AAGATTATGATATATGACCGATCAGGATCAAGATGGTTCTCACAATAAAGGCTGCTTATTAATTTTCCATCCATCAC
AATGGGCCCTCACCTTTGAAGCATGGTTTTCTTGAAGAGTTCCATTACTCTTATTGTAAGGCGAAGCAAAAATAG
CAGGAATCTTCTCTACAGTATTTCTGTAATTTGACGAATGGAAGAAACAATAGAAAAACAGAAAGCTGGAA
ATAAAGTACTATAAAGGATTTGGGTACTAGTACAGCTAAAGAAAGCAAGGAATATTTTGGTGATATGGAAGGCAT
CGCATCTTGTTTAGATATGCTGGTCTGGAAGATGATGCTGCCATTACCTTGGCATTAGTAAGAAGAGATGAT
GACAGAAAAGAAATGGTTAAACAAATTTTATGGAAGACCGGAGACAGCGTAGGCTACATGGCTTACAGAGCAATTT
TTATATGGTACTGCAACAAAGCATTTGACTTATAATGATTTTCAACAAGGAATTTGATCTCTCTCAAACTCA
GACAATGAAAGATCTATACCATCTCTTGTTGATGGCTTTAAACCTGGCCAGCGGAAGTTTATTTTACCTGTTTC
AAGAGGAATGATAAAGCTGAAGTAAAGTTGCCAGTTGGCTGGCTCTGTTGCTGAGATGTGGCTTACTCATCAT
GGAGAAACAAGCATGATGAGTCAATTTGTAATTTGGCTCAGAACTTTGGGGAAGTAAACAACATTAATCTGCTT
CAGCTTATGGTGGTTTGGAACTCGGCTTCATGGTGGCAAGATGCTGCAAGCCCTCGTTATATTTTCAAAATG
TTAAGCACTTTAGCAAGGCTACTTTTTCTCGTGCTGAGTGCACAACTCTTAAGTTCTCTTTATGATGATAAGAA
CGTGTAGAGCGTGAGTGGTATATCTCTATAATTTCCATGGTTTAAATAAATGGTGCTGAGGGCAATTTGATCTGGA
TGGGCTGTAAACTACCAACTATGATGCTAGGGAAATTTGTAACAATGTGACAGCAATGCTAGATGGCTGGAT
CCTCATCCCATGCTTCAAACTCAAAAACCTTAAAGCCAGGATTCAGAACTTGGTCAAAACAGTATGCGATG
AGTGGTGAATATTTGATGAGGACAGAAACAGTAGAAATACAGAGCTTCCAGTTAGAACTTGGACACAGGTA
TATAAAGAACAGGTTTTAGAACATGCTTAATGGAACAGATTAACACCAAGCAATTAATTTCTGATTATAAGAA
TATCATCTGACACAACTGTGGAATTTTGGTGAAATGACTGAAGAGAACTAGCACAGCAGAAAGCTGCTGGA
CTGACATAAGGTTTTAAACTTCAAACTACTCTTACTTGTAAATTCATGGTACTTTTGTATCATATGGGATGTCTG
AAGAAATAAGAACTGTGCAAGACATTCTGAAAGAAATCTTTGATTTACGATTAAAGTTTATTCAGGTTTACGTAAG
GAGTGGCTTGTTGGGAATGTGGGAGCAGAACTACAAAGCTTAAACATCAAGCCCGTTTCATTTAGAAGAGATA
CAAGGGAAAAATTACTATAGAGAATAGGTCAAAGAAAGATTTGATTCAATGTATTGTCACAGAGGTTTGAATCT
GACCCGATGAAGGCTTGAAAGAGCACAAGAAAGGCAGCAGAGAGGATGAACACAAAACAGCATGATGAT
AGGTCTCTCGGATTCAGGAACCTCTCAGGCCAGATTTAATTAATTTAAATATGCTCTGTGGTCTCTTACT
AAGAAATAAGTTGAAGAACTGATTAACACAGAGAGATGCAAAAGGCGAGAGGTCAGTGTCTTAAAGAAATCT
CCTTCAGATCTTTGAAAGAGGATTTAGCGGCATTGTTGAAGAACTGGATAAGTGGAACTCTCAAGAACGAGAA

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FIGURE 1079B

GATGTTCTGGCTGGAATGTCTGGAAAAGCAATTAAGGTAAAGTTGGCAAACCTAAGGTGAAGAACTCCAGTTG
GAAGAGACAATGCCCTCACCTTATGGCAGAAGAATAATTCTGAAATTACAGCTATGAAGGCAGATGCCAGCAA
AAGTTTGCTGAAGAAGAAGAAGGGTGATCTTGATACTGCAGCAGTAAAAGTGGAATTTGATGAAGAATTTCAGTGGA
GCACCAGTAGAAGGTGCAGGAGAAGAGGCATTGACTCCATCAGTTCCTATAAATAAAGGTCCCAAACCTAAGAGG
GAGAAGAAGGAGCCTGGTACAGAGTGAGAAAAACCTACATCATCTGGTAAACCTAGTGCAGAAAGTGAAG
AAACGGAACTCCTTGGTCAGATGATGAATCCAAGTCAGAAAGTGATTTGGAAGAAACAGAACCCTGGTTATTCCA
AGAGATTCTTTGCTTAGGAGAGCAGCAGCCGAAAGACCTAAATACACATTGATTTCTCAGAAGAAGAGGATGAT
GATGCTGATGATGATGATGATGACAATAATGATTTAGAGGAATTGAAAGTTAAAGCATCTCCATAACAAATGAT
GGGGAAGATGAATTTGTTCTTCAGATGGGTTAGATAAAGATGAATATACATTTTCACCGGCAAACTCAAAGCC
ACTCCAGAAAAATCTTTGCATGACAAAAAAGTCAGGATTTTGGAAATCTCTTCTCATTTTCCTTCATATTCTCAG
AAGTCAGAAGATGATTGAGCTAAATTTGACAGTAATGAAGAAGATTCTGCTTCTGTTTTTCACCATCATTTGGT
CTGAAACAGACAGATAAAGTTCCAAGTAAACCGGTAGCTGCTAAAAAGGGAAACCGTCTTCAGATACAGTCCCT
AAGCCCAAGAGAGCCCCAAAACAGAAGAAAGTAGTAGAGGCTGTAAACTCTGACTCGGATTGAGAATTTGGCATT
CCAAAGAAGACTACAACCCAAAAGGTAAAGGCCGAGGGGCAAGAAAGGAAAGCATCTGGCTCTGAAAAATGAA
TGCGATTATAACCTGGCAGGAAACATCCAAAACAACAGCAAGAAACGAGAAGACATCTTTTGATCAGGAT
TCAGATGTGGACATCTTCCCTCAGACTTCCCTACTGAGCCACCTTCTCTGCCACGAACCGGTGCGGCTAGGAAA
GAAGTAAATATTTTGCAGAGTCTGATGAAGAAGAAGATGATGTTGATTTTGCAATGTTTAATTAAGTGCCTCAA
GAGCACAAACATTTTTCAACAAATATCTTGTGTTGTCCTTTTGCTCTCTGCTCAGACITTTGTACATCTGGC
TTATTTTAATGTGATGATGTAATTGACGGTTTTTTATTATTGTGGTAGGCCTTTTAACATTTTGTCTTACACAT
ACAGTTTTATGCTCTTTTTTACTCATTGAAATGTCAGTACTGCTGATTTGGCTTGTAAGATTTGTTATAGACTGC
CGTGCAATTAGCACAGATTTTAATTGTCATGTTTACAACTACAGACCTGCTTTTGAAGTAAATTTAAACATTA
AAAATGGAAGTGTG

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MKSAGGCGAGAGVGGGNG.ITWNNAAKKKEESTANKNDSKKLSVERRYQKQTLHWHILLRDPTIGSVPELTQ
FMVYDDEVDGMNCREVTFVPLKYKIFDEILVNAADNQRKDNMTCKVSDIPESNIIINEGNKGTIPVSHKHEK
VYVYPLIFGQLTSSNYDDKKYVMTGGNGYGAKLCLNFISTKFTVETACEYKHSFKQTWMNNMMKTSEAKIKHF
DGDGYTCITFQPDLSKFMKEKLDQIVALMTRAYDLAGSCRGVYMFNGKLKLPVNGFRSYVDLYVKDLEGTG
ALXVTLHELANERWDCLTISEKGFQVCSFVNSATITKGGHVDYVVDQVVKLEIVVKKNAGKAGSVSPQVKNH
IWVFINCLINENPTFDSQTKENMTLPQKFSGSKQLSEKFFKAAANSNGCIVSEILNWWFKQTLQNNKCSVYKS
IKGPKLDDANDAGGKHSLECTLITLEGDSAGSLVSGLVIGRDYGVFLPRGLKLNVRSEASHQIMENAEINN
IKIVGLQYKKSYDDAESLTLRYGKIMIMTDQDQGSHIKGLLINFIHNNWPSLLKHGFLEEFITPIVKASKNK
QLESFYSITPEDEWKHHINKQAWKIKYKGLGTSTAKEAKEYFADMERHRLIFYRAGPEDDAAITFLASKKID
DKREWLTNFMEDRRQRRLHGEPEQLYGTATHLYTNDINKELILFNSNDNERSISPLVDGKFPQKRVFLTCF
KRNDREKVKVQAAGSVAEMSAYHGEQALWMTINVLNAQPSVNGNNILLLQGIGQFTRTLHGKGDAASPRYIFTM
STLARLLFPAVDDNLLKLYPDYDNGVEPEWIPYIIPMVLINGAEGITGWACKLPYNDARETIVNNRMLMDGL
PHFMPLPNYKNFKGTIQELGQNYQVAVSGEIFVVDNRNTEITELPVRTWTQVYKEQVLEPMLNGTKTLPALISDYKE
EHLWDTTGVFVVKMTEKLAQAABAAGHKVFLQTLTCNSMVLPHQMGKPKKVEYQVDILKEFFDLRLSYGLKE
YMLVGLMAKSTELNNQJPARLEIKIQGKIENRSKDLQIQLVFRGYESDPVAKWEAQEKAAEEDTQNHDD
SSSDSGPTSGPDFNIYNLMSLWSLTKHEVEELIKQDAKGAEVNDLKRKSPDLSWKKEDLAAFLVEEDLKVSEGRE
VDLAGMSGKALIKGVKGPKVKKLQEETMPSPYGRRIETITAMKDAASKLLKKKGLDAAVKEVDFDEEFS
APVEGAGEEALTPSPVINKGPKPKREKKEPGTRVTRKPTSSGKPSAKVKKNRPNWDSKSESDLEETEEVVP
RDSLRHAAENRDEKPYTFDESEEDDDDDDDDDNDEELKVASPIINDGEEDFVPSDGLDKRPTISPGKSA
TEPKSLDDKKSQDFGNLFVSPSYSGKSDASKSDNEEDSAVSFSPFGLQTDKVPKSTVAARKGKPSDTP
PKPRAKKKGKVEAVNSDSEFGIKPTTKTPKGGKAGKRRKASGENEGYDNFGRKSTKTSKKPKKTSFDQD
SDVDITPSPDPTPSLPRDPRGKVFYAESDEEEDDDVFAMFN

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FIGURE 1081

GAGAAGGCCAGGAAGTGACGGCCGCTCCCGGCTACCGGGGACTTCTGGAGTCCGAGAAGTCAACGGCGCGGTT
GCTGCGGCCCGCCGCTCCCCGGCCCGAGGCGCATGGAGAACGGAGCGGTGTACAGCCCCTACGGAGGAGGACC
CGGGCCCGCCAGAGGCCCGGAGCGGCTCGCTGCCTACTTTTCATGGGCCGGCTCCCATTTGCTCCGGCGCG
TTCTCAAGGGCTTGCAGCTGTGTCTGTCTCTGCTGGCCTTCATCTGTGAAGAAGTTGTATCACAATGTACTTTAT
GTGGAGGACTTTATTTTTTGTAGTTTGTAAAGTGCAGTGCCTTTCTTCTGAGTCTCCTTATCTGATTGTGTATT
GCACCTCCATTTTATGAGAGAGTTGTATACCACAAAAGTAAATCATCGGATTTTTATATTACTTTGGGAACAGGAT
GTGTGTTTTTGTGGCATCCATCATTTTGTTCACACATGACAGGACTTCAGCTGAGATTGTCTGCAATTTGTGT
TTGGATTTATAGCAAGTTTATGTTCTCTACTTGACTTTATCACTATGCTGTATGAAAACGACAGGAGTCCCAGC
TGAGAAAACTGAAAAATACCACTAGGGCTGAAGCCCTCACTGAGCCACTTAATGCCCTAAAGACTCTGGGGAGCAG
ATGTTACCTAAGTAGTGACCTGCATTGTGTGCTTGAGCCCTGGCAGAAAGCTCTTGTAAAATTTGTTAAATGT
TTAAACCACTTCTTTTGGAGAGCAAGGGGAAGGTCAAGAAGGCAGTTTTATCAATATTGTGTCAGTCACCAAAA
GTAGGCCAGATAAGTTAAAAAAATTTTTTTTAAATAATAATTGAACTTATCTCAAATGGAGATTTTGGTGGG
AGGAGGAGAAAACAATTGTTTTTAAATCACACAGCTCAACGGTGTATAAATGATTCTGTCACTCTGTACAGGTC
ATTCTTTTACTAGGCTTAGCTTCCAAATTATGCTTTATAGCTGTATAAACATCGTGATTATATCTACTACTTAG
AAATGTTTTATTTTTAAATTAATTTGCTTAGCTGTTGTTTGTATGCTTAGATTATGTTCTGTTAATGGGAATT
TAACATATTTAAGAAACCAATATTTAAATGTTGGTCTAGGTTTTTTTCTTAAACATATATTACAGGCTTTACT
GTATTTCACTCAGCCTTAAATGTTATATAATTTTGGATAACGGTTATTAATCTTTGAGACCTTCGTATAGCCT
ATAAATGTATGGGAGATGTTGGTATTTTATGTGTATAAAGCAACAATATCAGCAACTTCGTGTTTATCTGCA
CCTTGGTGTGTATGTCAGTAAAAAAAAGATTGTTTTGTAAACATAAAAAATGGAAGAACTGATACCACAC
CTAAGGACCAAGATAAAGAAAGACTTTTGCACAGACAGTGAAGTAATATAAAAAACAGCTTTGACCACTTA
CCAAGTATCTGAAGAGATGAGTTCTACTATGATTTAGAAAGTGGTTCGATTCCCTCTGGGCATATGATTATTT
TTACTAAAATTAATACAGCTCTGCGGCTCTTCTTAGTGTTTTCTTTGAAGCCAATCTGTTTTTTTAGGACACC
AGCCTTTGGTTTTTCTATGTTTCGAGATGCCCTCTCTCTGCTCTCCTTATCAGATAGAAATGGAGTCATGTCTGC
TGCTTCATCTAGCAGAGGTTGGCTCTGGCTCTGACACTTTTGTGAGTTGCTTTAGGTGGTCTGAAATCTGG
GCCCTTTGATTGTGAATACTGTGTAGCAGGATCTTGAGAGTCCTTGTCTTACATAGGCATTGCTCTAGTTGT
CTTTGGCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1082

MENGAVYSPTEEDPGPARGPRSGLAAYFFMGRPLLLRRVLKGLQLLSLLAFICEEVVSQCTLCGGLYFFEFVS
CSAFLLSLLILIVYCTPFYERVDTTKVKSSDFYITLGTGCVFLLASIIFVSTHDRTSAEIAAIVFGFIASFMFLL
DFITMLYEKRQESQLRKPEINTRAEALTEPLNA

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FIGURE 1083

ATGGATGCTGTGTGCTATGGTGAAGCTGTTTCTTCCAGCAGCAGGGAGAGAAAAAGGAGAAGAGGAAACACAAG
AAGAAATGCGTGGTGAGAGCCTCAATTCCTACTTCATGGATGTGAAATGCCAGGATGCTATAAAATCACTACA
GCAGTTTCTAATTCCTGCAATTTCCCTTAATGGCTCTCCGGATGTTGCCACTGATTATGGTGCCGTTTCATGGC
TCTTCAGCAGGTGCTGGGCATAGGCACCGAGGAGCCCTGTTTAATAGTGTGCTGCCTTTCCTTTACATGCTCCC
TCGGGTGAAGCAAGGCAGATGGAGAAGGCTTTAGCAGACAGCGTGGGCATGTTTCCAAGCCCTCAGGCTGCTGAG
CAACAATGCCGATGCCAGCACCAACAGGCTGAGGTGGCTTCTTCATTTTAG

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FIGURE 1084

MDAVCYGEAVSSQQGGEKKEKRKHKKCVVQSLNSYFMDVKCPGCKYKITTAVSNSCNFFLNGSPDVATDYGAVHG
SSAGAGHRHQEALFNSVSAFFLHAPSGEARQMEKALADSVGMFFSPQAAEQQCRCQHQQAEVASSF

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FIGURE 1085

GCTAAAGGTGATGTGGCCGCCCTCAACCGACGCATCCAGCTCGTTGAGGAGAAGTTGGACAGGGCTCAGGAAAGA
CTGGCCACGGCCCCGAGAAAGCTGGAGGAGGCAGAAAAAGCTGCAGATGAGAGTGAGAGAGGAATGAAGGTGATA
GAAAACCGGGCCATGAAGGATGAGGAGAAGATGGAAATTGAGGAGCTGCAGCTCAAAGAGGCCAAGCACATTGCG
GAAGAGGCTGACCGCAAACTACTGGGAGGTAGCTCGTAAGCTGGTCTTCCTGGAGGGTGAGCTGGAGAGGGCAGAG
GAGCGTGTGGAGGTGCTGAACTAAAAATGTGGTGACCTTGAAGAAGAACTCAAGAAATGTTACTAACAATCTGAAA
TCTCTGGAGGCTGCGTCTGAAAAGTATTCTGAAAAGGAGGACAAATGTGAAGAAGAAATTAACCTTCTGTGTGAC
AAACTGAAAGAGGCTGAGACCCGTGCTGAATTTGCAGAGAGAACGGTTGCAAACTGGAAAAGACAATTGATGAC
CTGGAAGAGAAACTTGCCAGGCCAAAAGAAGAGAACGTGGGCTTACATCAGACACTGGATCAGACACTAAACGAG
CTTAACTGTATATAAGCAAAACAGAAGAGTCTTTGTTCCAACAGAACTCCGGAGCTCCGTGGGTCTTTCTCTTCT
CTTGTAAAGAGTTCCTTTTGTATTGCCATCTTCGCTTTGCTGGAATGTCAGCAAAATATGAATACATGACCA
AATATTTTGTATTGGAGAAGCTTTGAGCACGAGTTAAATCTCATGCGCTTCCTTTTTTTGTCAAATGGCACCAAC
TTTTTCAGCTCTCTTATTTTTTCTTAAGTTGCATTATTTCTTAAGGTAGGCAGGGTATTTCTAGTAAGCATAG
TTTCTTAAGACAGAGGCCATTTGGTTCTTGGGAGAATAGGCAGCCCCACACTTTGAAGAACACAGACCCCAAGTAT
CTAGTCGTGGATATGATTAAACGCTGAAGACCACAACTTTTGGGTCAACTGTGTGTCAAACTATAGGAGAGAC
CAGGGACCACCCCACTCTCTATTATTACGACCCACACTACCCAGGAAATACACTAGCAAAATGTGCAATGGAATA
AAATCCACACTTTACTTTAGATTCTTGAACCTGTATCATATGTAATAGTATCACTTTTCTACATTTTGGTCAAA
TAAATTTTACATAAACTAC

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FIGURE 1086

AGCTCATCCACACTTCCAATCACTTTCCGGAGTGCTTCCCCTCCTCCGGCCCGTGCTGGTCCCACGGCGGGCC
TGGGTCTCGCGCGCGTATTGCTGGGTAAACGGGCCCTTCTCCGCGCTCGGCCCGGCCCTCTCGCTCGGCTCGTCC
CTCCTTCCAGAACGTCGCCGGCTCCTCGCGAGTCGCCGAGTCAGAAGAAATGGGACTCCCTCCGCGACGTGCCCGGAGCAGCT
CCCTTCGCTGTGGAAGCGCGGTGCTCTTCAAGAAACCGGAAGCCGCTGGTGACCCCTGGCGACCCGGTTTGTTT
TCGCTCCGTTTCCAACACTAAGGAATCGAACTCGGCCGCCCTTGGGGCGGCCCTACGTAGCTTGCTTCTGGT
TGCTATGGATGCACTGGTAGAAGATGATATCTGTATTCTGAATCATGAAAAAGCCATAAGAGAGATACAGTGAC
CCAGTTTCAATATATTACAGGAGATGAATCTGTTGCTTCCCAATTTTGCTCTTGTCACATGCATATGAAGACATCAA
AAAACGACTTAAGGATTACAGAGAAAGAGAAGCTCTTGTAAAGAAGAGAATAAGATTTTGGAAAGAAAAGCTAAT
AGCTCGATTTGAAGAAGAAACAGTTCCGTGGGACGAGAACAAAGTAAATAGGCCATATCATGCATATCGAGAGGT
TTGCATTGATAGAGATAATTGGAAGCAAACCTGGACAAAATGAATAAGACAACTCTGAATCTTTGAAAGTATT
GAATGAGCAGCTACAATCTAAAGAAGTAGAACTCCTCCAGCTGAGGACAGAGGTGGAACTCAGCAGGTGATGAG
GAATTTAAATCCACCTTCATCAAACCTGGGAGGTGGAAGAGTTGAGCTGTGACCTGAAGATCCATGGTTTGAACA
AGAGCTGGAATGATGAGGAAAGAAATGTAGCGATCTCAAATAGAAGTACAGAAAGCCAAACAAACGGATCCATA
TCAGGAAGACAATCTGAAGAGCAGAGATCTCCAAAACCTAAGCATTTCAAGTGATAATATGCAGCATGCATACTG
GGAAGTGAAGAGAGAAATGTCTAATTTACATCTGGTGACTCAAGTACAAGCTGAAGTACTAAGAAAACTGAAAC
CTCAACTGCAATCAAGAAAGCCTGTGCCCTGTAGGATGCAAGTGAAGACCTTGAAGAGACAGCAAAAACTGCA
CTTGATGAATTTTACTGCAACATACACAAGACATCCCCCTCTCTTACCAAAATGGCAAAGCTCTTTGTCATACCAC
ATCTTCCCCCTTACCAGGAGATGTAAGAGTTTATCAGAGAAAGCAATCTCCAATCATGGACAGACAAATGAGAG
ATCCAATCTCAATGATGGTACATGCTTTACAGGAACACAGTTCTTATGGCAGAAATCTCTGGAAGACAATCTCTG
GGTATTTCCAAGTCTCTCAATCAAGTGAGACAGCATTGGGGAAACTAAAACTTAAACTTTGCTTTACCCAA
CCTTCCACCACGCTACTTCTGGATCAACATAATCAGAAGTGCCTTTATAAGAAATTAATTGGAAAGATTTCAG
ATTTACCACATGAGGACACTTATCTCTTTCAGTGGTCTCCCAAGAAATATTAAACAACTGAAAGGAGATTTTG
ATTAATAATTTTGAGAGGTCTTCAGTATCTATATTTGAACACACTGTACAATAGTACAAAAACCAACATAGTTGG
TTTTCTAGTATGAAAGAGCACCTCTAGCTCCATATTCTAAGAAATCTGAAATATGCTACTATACTAATTAATAAG
TAAACTTAAGGTGTTTTAAAACTCTGCCTCTATATTAATTGTAATAATTTGCTCTCAGAAAGTGAATTTGG
AGATTGTAGACGTGGTTTTACAAAATGGAATGCTAAATACTGTTTCAAAAAATAAAAGGAAAAACATGTTTC
TTCAAATTCATAATGGAACAAATGGCAATGTGAGTAGGTACATTTCTGTTGTTATAATGCGTAAAGATATTGA
AAATATAATGAATAAAAGCATCTTAGTTATACCATCTTTATATGCTATGCGTTTCAATATTTAAGATTTAA
GTGATTTTTTGGTCACAGTGTTTTGTGATAAAATTTTTTGAATTTGAAGTTTGAATCTAAGACTTGAAACAA
CCTGATCATTGAAGCCAACTTTGTCCAGCACATTCTTAAGTCTCAATTTGGGAAAAAAAAAAAAAAAAAAAA

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FIGURE 1087

MDALVEDDICILNHEKAHKRDTVTPVSIYSGDESVASHFALVTAYEDIKKRLKDSEKENSLLKKRIRFLEEKLIA
RFEETSSVGREQVNKAYHAYREVCIDRNLKSKLDKMNKDNSES LKVLNEQLQSKEVELLQLRTEVETQQVMRN
LNPPSSNWEVEKLSCDLKIHGLEQELELMRKECSDLKIELQAKQTDPPYQEDNLKSRDLQKLSISSDNMQHAYWE
LKREMSNLHLVIQVQAE LLRKLKTSTA IKKACAPVGCSEDLGRDSTKLHLMNFTATYTRHPPLLPNGKALCHITS
SPLPGDVKVLSEKAILQSWTDNERSIPNDGTCFQEHSSYGRNSLEDNSWVFPSPPKSSETAFGETIKTKTLPLPNL
PPLHYLDQHNQNC LYKN

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FIGURE 1088

GCATGGAGCCGGGGCGCGGGGGGGCGCGCGCTGCTAGCGCTGCTGTGCTGGCCTGCGCGCTGCGCGCCGGG
CGCGCCCAATACGAACGCTACAGCTTCCGAGCTTCCACGGGACAGAGCTGATGCCGCTCGAGTCGGGCTACCGG
CACGCGCTGGACAGTACAGCGGGGAGCACTGGGCGGAGAGCGTGCGCTACCTGGAGATCAGCTCGGCTGCAAC
CGCTTGTGTCGCGACAGCGAGGCTTCTGCCACCGCAACTGCAGCGCCGCGCCGAGCCGAGCCGCGCGCGCGG
CTCGCCAGCTATCCGAGCTGCGCTTCTGGGGGCTGCTGCGCCGCGCACTGCCTCAAGCGCTGCAAGCAG
GGCCTGCCAGCTTCCGCGAGTCCAGGCCAGCCGCGAGGTGCTGGCGGACTTCAGCGCCGCGAGCCCTACAAG
TTCTTCGAGTTCGCTTACTTCAAGGCAAATAAATCTCCCAAAGCCATCGCCGCTGCTCACACCTTTCTACTGAAG
CATCTGATGACGAAATGATGAAGAGGAACATGGCATATTATAAGAGCTGCCTGGTGCCGAGGACTACATTAA
GACCTGGAAACCAAGTCATATGAAAGCCTGTTTCATCCGAGCAGTGGGGCATACAACGGTGAGAACTGGAGAAC
TCCATCACAGACATGGAGCTGGCCCTTCCGACTTCTTCAAAGCCTTTTACGAGTGTCTCGAGCTGCGAGGGT
TCCAGGGAGATCAAGGACTTCAAGGATTTTACCTTTCCATAGCAGATCATTATGTAAGTTCTGGAATGCAAA
ATACAGTGTGAAGAGAAGCTCACCCAGTTATAGGAGGCTATCCGGTTGAGAAATTTGGCTACCATGTATCAT
TACTTGAGTTTGCTTATTATAAGTTGAACGACCTGAAGAATGCAGCCCTGTGCGAGTCAGCTATCTGCTCTTT
GATCAGAATGACAAGTATGCAGCAGAACCTGGTGATTACCAGTACCACAGGACACTTGGGCTCTCGGAT
GAGCATCTCCAGCCAGACCTGAAGCAGTTCAGTTCTTTAATGTGACCACTCCAGAAGGAGCTGTATGACTTT
GCTAAGGAAATATAATGGATGATGATGAGGGAGAAGTTGTGGAATATGTGGATGACCTCTTGGAACTGGAGGAG
ACCAAGCTAGCCACAGCAACCAAGAGACTTCTCTTGGCGTTCAAGAAACAGATTCTTTGCTCTTTCCCAA
CAGCCAGGCTGTTGATACCTCAGAGCCTTCTCTTTACTCTCAAAGTGAAGGGAAGCCCGCTCTCTAACT
GCATGTATCAGGGGTGAGCCTGCTTTCTATCTTCACACCTGCCACCTCATGTTTCACACTATCTTCTCACC
TTTTTTTGGAGTGGAGTCTCGCTCTCTTGCCAGGCTGGAGTGCAATGGCAGTTCTCAGCTCACTGCAACCTC
CGCTCTTGGGTTCAGCAATCTGCTGCATCAGCCTCCGAGTACCTGGGATTACAGGCAATGTGCCACACGCC
CGGCTAATTTTGTAATTTTAGTAGAGACGGGTTTTGCCATGTTGGCCAGGCTGGTCTCGAACTCTTGACTTCAG
ATGATCCATCTGCCTTGCCCTCCACAGTGTGGGATTACAGCGTGAGCCACCATGCCCGGCTCTTCTCACC
TTTACACCTGTCTTCTTATCTCACAATCTGTTTTACACCTTCATCCCTGTCTTCTCATATTTACACTTGCTT
CCCCATGTTATAGCTGCCTTCTTACCATTTTGGTTGAAGGGCAGTCTTCTGCGCTGTTTTTTTGTTTTTT
CCAGAAATCAGTATTAATTTTTAAATAAGAAAAACATTCCTAGAAGATGATAATTGTGAAAACTCTTTGGCT
TATTTGCTTTTCCAGATTTTAGTCTCCTTTCTCCCATCCGGAAAGATGGTGAAGACATAGGCTAAATTTCTC
CAGCCTCACAATGGTCTTCACTTGGTCTGACTTGTACCAATTTAGCACCCTGAAAAACAAGTTGAGTAGAGA
GTGTAGAGTGCAGAAATGTGCTTTTGCCCACTTTGCACTCCTCCAAATTACAAACGGTTGGCCGATCCCAATGA
GGCAATGCTTAGTTATAAGTCTCCGAGTTGAAAAAGAAAGCCAGAGCTGTCTAGTTTCATTCTTTCT
AGTAAATATTATTAGAT

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FIGURE 1089

GAATTCGGGCGCGAAGCGGCCGGCTGGGCGCGACTGCAGAGCCGGGAGGCTGGTGGTCATGCGGGGTTCTCTG
GTTTCGCATCCTCCTTCTGCTGCTGTTCTGCTGCTTCTGGGCCCTACGCGCGGCTTGCCTCAATGCCACCCAGAGG
ATGTTTGAAATTGACTATAGCCGGGACTCCTTCTCAAGGATGGCCAGCCATTTCGTACTACATCTCAGGAAGCATT
CACTACTCCCGTGTGCCCCGCTTCTACTGGAAGGACCGGCTGCTGAAGATGAAGATGGCTGGGCTGAACGCCATC
CAGACGTATGTGCCCTGGAACCTTTCATGAGCCCTGGCCAGGACAGTACCAGTTTTCTGAGGACCATGATGTGGAA
TATTTTCTTCGGCTGGCTCATGAGCTGGGACTGCTGGTTATCCTGAGGCCCGGGCCCTACATCTGTGCAGAGTGG
GAAATGGGAGGATTACCTGCTTGGCTGTAGAGAAAGAGTCTATTCTTCTCCGCTCCTCCGACCCAGATTACCTG
GCAGCTGTGGACAAGTGGTGGGAGTCTTCTGCCCAAGATGAAGCCTCTCCTCTATCAGAATGGAGGGCCAGTT
ATAACAGTGCAGGTTGAAAATGAATATGGCAGCTACTTTGCCTGTGATTTTGACTACCTGCGCTTCTTGCAGAA
CGCTTTCGCCACCATCTGGGGGATGATGTGGTTCTGTTTACCAGTATGAGGACACATAAAACATTCTTGAAATGT
GGGGCCCTGCAGGGCCTCTACACCACGGTGGACTTTGGAACAGGCAGCAACATCACAGATGCTTTCTTAAGCCAG
AGGAAGTGTGAGCCCAAAGGACCCTTGATCAATTCTGAATTCATATACTGGCTGGCTAGATCACTGGGGCCAACT
CACTCCACAATCAAGACCGAAGCAGTGGCTTCTTCCCTCTATGATATACTTGCCCGTGGGGCGAGTGTGAACCTG
TACATGTTTATAGGTGGGACCAATTTTGCTATTGGAATGGGGCCAATCACCCTATGAGCAGACGCCACCCAGC
TACGACTATGATGCCCACTGAGTGAAGCTGGGGACCTCACTGAGAAGTATTTGCTCTGCGAAACATCATCCAG
AAGTTTGAAAAGTACCAGAAGGTCCTATCCTCCATCTACACCAAAGTTTGATATGGAAGGTCACTTTGGAA
AAGTTAAAGACAGTGGGAGCAGCTCTGGACATTCTGTGCTCCCTCTGGGGCCATCAAAAGCCTTTATCCCTTGACA
TTTATCCAGGTGAAACAGCATTATGGGTTTGCTGTACCGGACAACACTTCTCAAGATTGAGCAACCCAGCA
CCTCTCTCTTCAACCCTCAATGGAGTCCACGATCGAGCATATGTTGCTGTGGATGGGATCCCCAGGGAGTCTT
GAGCGAAACAATGTGATCACTGTGAACATAACAGGGAAAGCTGGAGCCACTCTGGACCTTCTGGTAGAGAACATG
GGACGTGTGAACATGTGTGCATATATCAACGATTTTAAAGGTTTGTTTCTAACCTGACTCTCAGTTTCAATATC
CTCACGGACTGGACGATCTTTCCACTGGACACTGAGGATGACAGTGCAGCCACCTGGGGGGCTGGGGACACCGI
GACAGTGGCCACCATGATGAAGCCTGGGCCCAACAATCATCCAATACAGCTTCCCGGCTTTTATATGGGGAAC
TTCTCCATTCCAGTGGGATCCCAGACTTGCCCCAGGACACCTTTATCCAGTTTCTGGATGGACCAAGGGCCAG
GTCTGGATTAAATGGCTTAACTTTGGCCGCTATTGGCCAGCCCGGGGCCCTCAGTTGACCTTGTGTTGTGCCCCAG
CACATCTGATGACCTCGGCCCAACACCATCACCGTGCTGGAACCTGGAGTGGGCACCTGCAGCAGTGTGAT
CCAGAACTATGTGCTGTGACGTTCTGTGGACAGGCCAGTTATTGGCTCATCTGTGACCTACGATCATCCCTCCAA
CCTGTTGAAAAAGACTCATGCCCCACCCCGCAAAAAACAAAGATTATGGCTGGACCATGTATGATGATGA
AAGCCTGTGCTTTTGAAGGATCTACCTTGAACATACCTCACAGATCCTCCCTGTGATGCCACATTTCACTGATT
GGAATGTGGAATGGAAGGAATTTAGGATGTGCATTTTCACTGAGGTTTCCCTGCATCCCTGCAGTGGCCAA
GCCCCACCTTCAGGGACCACTGGAATGTGTGAGGGGCTGACAGCACAGTAACTGTGCATACATCTGCAGGGCT
GGAATGGAAGCTTTAAAGGTGGTAGTGATTTTATTGTTGGAAGATCATGTACCTTTTGTGTTAAATAAAATTGG
CCCCAATTC

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FIGURE 1090

MPGFLVRILLLLLVLLLLGPTRGLRNATQRMFEIDYSRDSFLKDGQPPRYISGSIHYSRVPRFYWKDRLLKMKMA
GLNAIQTYVPWNFHEPWPGQYQFSEDHDVEYFLRLAHELGLLVILRPGPYICAEWEMGGFLPAWLLKESILLRSS
DPDYLAADVCKWLGVLPLPKMKPLLYQNGGPVITVQVENEYGSYFACDFDYLRLQKRFRHHLGDDVVLTDTGAHK
TFLKCGALQGLYTTVDFTGGSNITDAFLSQRKCEPKGPLINSEFYTGWLDHWGQPHSTIKTEAVASSLYDILARG
ASVNLVYMFIGGTNFAFWNGANSPYAAQPTSYDYDAPLSEAGDLTEKYFALRNIIQKFEKVPEGPIPPSTPKFAYG
KVTLEKLTVGAAALDILCPSPGPIKSPLYPLTFIQVKQHYGFVLYRTTLFPQDCSNAPLSPLNGVHDRAYVAVDGI
PQGVLERNNVI TLNITGKAGATLDLLVENMGRVNYGAYINDFKGLVSNLTLSSNILTDTWTFIPLDTEDAVRSHLG
GWGHRD SGHHDEAWAHNSSNYTLPAFYMGNF SIPSIGIPDLQDQTFIQFPGWTKGQVWINGFNLGRYWPARGPQLT
LFVPOHILMTSAPNTITVLELEWAPCSSDDPELCAVTFVDRPVIGSSVTYDHPKPFVEKRLMPPPPQKNKDSWLD
HV

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FIGURE 1091

CGCAGGCGGAGCGCAAGTCTGTACAGCCAGTCAGTCCGCCAGTCCGCCAGCCAGTACCTCTCTCTCCCTCGGCCCT
 CSTAAGCTGTCCGCGGTCTGTTTGGCCCGAAGCGCGCGGAGGCGCTGATCATGSCGAGCATTCATCTCGGTGCGAC
 CTGAAAGAACCTCAGAGGTTGGACCTTGGCCAAAGCCGCTGGTGAAGTTTCATCCAGCAGACTTACCCAAAGCGCGGG
 GAAGAGCAGGCGCCAGTACTGCCGCGCGCGGAGGAGCTCAGCAAGCTCGCGCGCGCCGAGTCTCGTCTCGCGTG
 GACAAGCAGAGGCGCGCTCGAGAGCGCTCTCGAGATATTATGATCAGATTGTTCTATTGAACCCAAATTCCTCA
 TTTTCTGAAATCAGATCTGCTTGGACATTACCTGGAAGGATGCTTTTCGATAAAGGTTTCACTTTTGGAGGCTCT
 GTAAATCTGGCTCTTGCAGCTTAGGATATGAAAGAGCTGTGTGTTGTTCAATTGTGCAGCCTTAGCTAGCCAA
 ATTGCAGCAGAACAGAACCTGGATAATGATGAAGGATTGAAATCGCTGCTAAACATTACCAGTTTGTCTGTGTT
 GCCTTTTTTACATATTAAAGAGACGGTTTTTATCTGCCTTAAGTCGAGAGCCGACCGTGGACATATCTCCAGATAC
 GTTGGGACCTCAGTCTTATTATGCTGGCAGAGGCTCAAGAAGTATTTTTTAAAGCCACAAGAGATAAAATG
 AAAGATGCCATCATAGCTAAATTTGGCTAATCAGGCTGCAGATTATTTGGTGATGCTTTCAACAGGTGCTCAATAC
 AAAGATACTCTCCCCAAGGAGGTGTTCCCTGCTTTGGCTGCAAGCACTGTATCATGCAGGCCAATGCTGAGTAC
 CATCAGTCTATCTGGCAAAACAGCAGAAGAAATTTGGAGAAGAAATTCGAAGTTTACAGCATGCAGCAGAAGTGC
 ATTTAAACAGTGGCATCTCGCTATGATGAATATGTTAATGTGAAGGATTTTTCTGCACAAATCAATCGTGCCTT
 GCTGCGACGAAGAAGGATATGACTTCTATTATCATGATCGAGTTCCAGACCTTAAAGATCTAGATCCTATTGGC
 AAAGCCACACTTGTGAATCTACCCCGGTCAATGTACCCACTCAGTCAGAAATTTACTGTCTGTTTGAAGAATG
 GTTCCCGTGTGAGTACAGCAGTCTTTGGCTGCCTATAATCAGAGGAAGCCGATTGGTTAAGAGATCAATTGCT
 CAGATGAGAGAAGCCACCACTTTGGCAAAATGGGGTGCTAGCTTCCCTTAATCTTCCAGCAGCAATTGAAGATGTG
 TCTGGAGACACTGTACCTCAGTCTATATTGACTAAATCCAGATCTGTGATTGAACAGGGAGGCATCCAGACTGTT
 GATCAGTTGATTAAAGAACTGCCGTGAATTACTGCAACGAAATAGAGAAATCCTAGATGAGTCAATTAAAGTTTGTG
 GATGAAGAAGAAGCAACGATGAATGATTAAAGAGCAAAATTTAAGGAACGTTGGCAAGGACACCTCAATGAA
 CTGTATAAGCCTTTAAGAGCAGAGGGAACCAACTTCAGAACAGTTTATGATAAAGCTGTGCGGACGAGGACAA
 GTGAAGAAGTGTACCAGTCTCATCTGTGACACCATCGTGCTTTTGTGAAGCCAGAGCCTGAGCTGAATGCTGCC
 ATCCCTTCTGCTAATCCAGCAAGACCATGCAAGGCGAGTGAAGTTGTAATGTCTTAAATCTTATTGTCAAAT
 CTGTGATGAAGTAAAGAAAGGAAGAGGGTCTGGAGAATGACTGAAATCTGTGAATTTGACATGACAAGCAAG
 TTTTTCAGAGCCCTGGCTCAAGATGGTGTGATAAATGAAGAAGCTCTTCTGTTACTGAATAGATGACTCAT
 GGAGGTCTTACAACATAAGTCCAAGAAATCTCAAAGAAACAGGAGGACTTCTTAAATATATTACAGTCTCACAT
 CAGGAATTTTCAAAATGAACAACTTAATAATGAAGCTAATTAAGAGAAGAGTTTGAAGAATTTAGTCTACT
 GCATATGACAACCTTTGTTGAACCTGTAGCTAATTTGAAGGAAGGCAAAAGTTTACAAATGAGTTGACTGAAAT
 CTGGTCAAGTTCCAGAACAAATGCGATGATAGTTTTTGACGGAAGACAGAAAGAGATGAATCTTAAAGGAC
 TTGCAACAAAGCATTCCAGAGAACCTAGTGCTCTTCAATTCCTACACTCGGTATCAGTCTTCCAGCAGGA
 GGACATGCACCAACTCTCCAACTCTCAGCGCCAAAGAACCTAGCCGCTACTAAGCCCCAGCCCCAGCCAGGCT
 CCACCACTGTGCTCTCCAGCAAACTCAGCTCTCTCTGCTACTGCTCCATCTCCAGTGGGGGCTGGGACTGCTGG
 CCACTTCCATCAGCAACGCTGGCTCAGCTCTCTCTCCACAGGCGCAGGGACACCCATATCCCACTTCCAGGA
 TATCTCTGGGTATTGCCAAATGCCATGCCATGGGCTATAATCCTTATGCGTATGGCCAGTATAATATGCCATAT
 CCCACAGTGATCACCAGAGTCTTGCAGAGGCTCCATACCCGGGACCCAGCAGCTTATACCCCTTCCCTCAG
 CCCCCAGCAGTCTTACTATCCACAGCAGTAAATATGTCTGCTCAGCAGCTCAGCTGATTGATCAGATCAGAGGAAA
 GAAATACCAACCTTGAATAAGTGTACTAACTCTACGCTCTGGTTAATGTAATGACTCTCTTGGACTGAATGC
 AGTGATAAATTTCTGTCTACAGCTAGAAGCTGTGCCCAAGTTCACATTGCTTATACAGATGAGAGATTGCTGCT
 GTTGCAGATAAAACACTAGGTATAATAGGATTGAAATTGCAATTACAGTTTCAATAAAATGAAATGAGAAAT
 AACCTGCAAGTGAACAAATTGAAACGATTATACCTTCTACATAAGACATGGTTGGGACATCAGATCTACAAG
 ATGGTTTAAAGTATGGATCTAGAGAAAAATTAAGTTTCTTCTTCTTGGTTTGGTTTAAATTTCCATT
 ATGCTATTTTGCATAATCAAGGCACTGTAATCTTATAATTTTAAATAAATTACTTAAAGAC

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FIGURE 1092

MATFISVQLKKTSEVDLAKPLVKFIQQTYPSSGEEQAQYCRAAEELSKLRRRAVGRPLDKHGALETLLRYYDQI
CSIEPKFFPFSENQICLTFTWKDAFDKGSIFGGSVKLALASLGYEKSCLFNCAALASQIAAEQNLDNDEGLKIAA
KHYQFASGAFLHIKETVLSALSREPTVDISPDTVGTLSLIMLAQAQEVFFLKATRDKMKDAIIAKLANQAADYFG
DAFKQCQYKDTLPKEVFPVLAAKHCIMQANAHEYHQSILAKQKKKFGEIARLQHAELIKTVASRYDEYVNVKDF
SDKINRALAAAKDNDFIYHDRVPLDKLDLPIGKATLVKSTPVNVPISQKFTDLFEKMPVPSVQQSLAAYNQKKA
DLVNRISIAQMREATTLANGVLASLNLPAAIEDVSGDTPVQSILTKSRSVIEQGGIQTVDQLIKELPELLQRNREI
LDESRLRLDEEATDNDLRAKFKERWQRTPSNELYKPLRAEGTNFRTVLDKAVQADGQVKECYQSHRDTIVLLCK
PEPELNAAIPSANPAKTMQGSSEVVNVLSLLSNLDEVKKEREGLENDLKS VNFDMTSKFLTALAQDGVINEEALS
VTELDVYGGTTIKVQESLKKQEGLLKNIQVSHQEFSSMKMQSNNEANLREEVLKNLATAYDNFVELVANLKEGTK
FYNELTEILVRFQNKCSDIVFARKTERDELLKDLQQSIAREPSAPSIPTPAYQSSPAGGHAPTPTTPAPRTMPPT
KPQPPARPPPPVLPANRAPSATAPSPVGAGTAAPAPSQTTPGSAPPQAGPPPYPTYPGYPGYCMFPMGYNPYA
YGQYNMPYPFVYHQSPGQAPYPGPQQPSYPPFPQPQQSYYPPQ

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FIGURE 1093A

TTGGCCCCGTGCGTGGGGCTGGGGTGGAGGGCGGGACAGAGGGGCTGGGCCAGGCCAAAGCTTCTGTGCTGCTGCG
TGCGGAGGCCCGAGGACAGGACGTGGGGCTGGGCCGGGCAGTGCCGGGACTCGGAGGAGCAGGAGGGCGAGGTCGCCGCC
GAGCTCTGAACCCCGCTGCTTGCCGCGCGGTGACCCCGCGCCGCTCGACCGCTGGCTGTTCCGAG
ACGATTGGTGGGGCGCGCGCGCGCGCGCGCTGTTGGGGTGGGGAGACGCGCGCGGAGGACGAGCGAG
CTCAGCGAGTTTGAAGGAGACCGCGAGCGCGCTGCCGCCGTCATGTCGAAGACTCGAGCGCCCTGCCCTGGTCC
ATCAACAGGGAGCACTACGAGCTCGAGGAGTGATCGGGAGTGAGGACAACTGCTGTAGTCCAAGCAGCTTATTGT
GCCCTAAAAAGGAGAAAGTGGCAATCAACCGGATAAACCTTGAGAAATGTCAAACTAGCATGGATGAACCTCTG
AAAGAAATCAAGCCATGAGTCAATGCCATCATCTCTAATATTGTATCTTACTACACATCTTTTGTGTAAAAAGAT
GAGCTGTGGCTTGTCAATGAAGCTGCTAAGTGGAGGTTCTGTTCTGGATATTATTAAGCACATTGTGGCAAAAGGG
GAACACAAAAGTGGAGTCCATAGATGAATCTACCATTGCTACGATACTCCGAGAAGTACTGGAAGGCTGGAATAT
CTGCATAAAAATGGACAGATCCACAGAGATGTGAAGCTGGAAACATTCTCTTGGAGAAAGATGGCTCAGTACAG
ATTGCAGACTTTGGGGTTAGTGCTTTTTAGCAACTGGTGGTGATATTACCCGAAATAAAGTGAGAAAGACCTTT
GTTGGACACCCCTTGTGGATGGCACCTGAAAGTTATGGAACAGGTCCGTGGTTATGATTTCAAAGCTGATATTGG
AGTTTTGGAATTACAGCAANTGAATGGCTACAGGGCGGCTCCTTATCATAAATATCCACCAATGAAGGTTTTA
ATGCTGACACTCAGAACCATCTCCTCTTTTGGAAACTGGTGTTCAAGATAAAGAAATGCTGAAAAATATGGA
AAATCATTTAGAAAAATGATTTCTATTGTGCTTCAAAAAAGATCCAGAAAAAGACCAAGCAGCAGCAAGATGGA
AGGCACAAATTTTCCAGAAACGAAGAATAAAGAAATTTCTCAAGAAAAACACTTGCAGAGAGCACCACCACTT
TCTGAAAGAGCAAAAAAGGTTGCGAGAGTACCAGGTTCCAGTGGCGCTCTTCAATAGACAGAGGATGGAGGCTGG
GAGTGGAGTGATGATGAATTTGATGAAGAAAGTGGAGAGGAAAGCAGCAATTCACAACCTCAGGCTCTCCCCGA
GTGAAGAATCAATATCAAAATCTGAGCTCTTCCACAACCTGATCCTGTGGGTACTTTGTCTCAAGTTCCAGAA
CAGATCTCTGCTCATCTACTCTCAGCGAGTGGGCAGATTGCTACAGCAGCACTCAAGTCTCTCTCCACCACCC
CGAGAGCCAGCAAAAAACAGCTCAGGCTTTGCTTCAGGATCAGGTTCAACAAGAACCAAGATCCCAATCAGTCTA
GTACTAAGATTAAAGAAATCCAAAAAGAACTAAATGATATTGATTTGAATTTGAATTTACTCTGGGAGATACAGCA
GAGGGTGCTCTCAGGAACCTATTCTGCTGGCTGGTGCAGCGGAAGGGATTAGTAATAGTGCACGTAAATTTG
CAGAAATTTGGAAGAACCTCAGTCAAAATCGATCTGCACTTTCAAACCTGGCATCTGGTGTGCAAGGCTCAGAT
ATTCTGATGATGGTAACTGATAGGATTTGCCAGCTCAGCATCAGCTAAACCACACTATGCCAAAGAACCCAGCAAC
TAAGGAGATTCCACACATGCGTATCTCTGTTGCTTCTATTGGCCTAAACCCACTATGCCAAAGAACCCAGCAAC
AAACCTCCCGGCTAGGAGCTTTAGAAGTCTTTATGTTCTTCTGCCATCTCTCTTTCCACAGGGAAAGA
AAAGTTGGATCACTAGTGGCCACATCCCAAGATTCGTTAGTAAACTTACTTACTATGTCCCTGTCTCTCCTC
CATCTGAGAAGTGGCCCATGTGCTTCAAGGCCCAGGAGGAGATCTGTCAAGCTCATTCTTGCTCTTCCATGTA
TGCCCGAGGTTGAAAAAGTAGCAGCTGATCGGGCTTCTCATCTGCTTCTCCCAACACTGCTCAGGATATTGG
ACATCTTTGGGATATCTCTTTACCACCTGAAGTAGAATTGATTGTTCAAGCTGGTCTTCAAGCGTCTTCAAGCGT
TTTTCTTTGTACCTGATGTAATCTAGCAACCTTTTGTAGGAAAAAGCACAGCCTCAGATGGAGCGCCCTTAA
ACTGTGTTCTGTTTGTGTTGCTGATGGTGTCTTCAAGCGTTTTGTCAAGCTGCTGCAAAACATCTGACTGTAGCCGA
CTCTCTCCAGAAAGGGTTGCTAGGCTTAACTTCAAGCTGGTGCAAAACATCTGACTGTAGCCGAATCTCAGCCATC
AGATCTCTCAAAGTGAACCTTTGGATTGTTTTTACAGCAACATCGAATGGAATGGAATTTATTTTCAAATATCAAATG
AGAGGTGGTTTTTGAACAGGAAATCAATAATCATATCTTGGAGAAGTATTATTTTCAAATATCAAATGGAAG
AAAAACTCAATCTCCATGAAATCAGTTCGCCCTGGCCCTCAAGTCTGGAGGAAATGGGATGCAAGGCTGAGA
TTTCTACAGCAATAAAGGAGACACACACTGGGCGAGAGAGGCTGCCCTGGCTGCTCTTCCGATGACCTT
TGGAGGGGGTCTCTGTGCTGAAGCTAACTCAAGATGGAAGTGAACCACTGTGCGCGACCTTTAGGTTTTT
ATGAGTAGACAGTGTTCAATTTGATTTTCTACAGAAATAATAAATTTACTTTAGGTTTTAAAAAGAGCACTA
TAATGCAATATGTAATAATCAGTGAGGTTGATTTTCTTTTTTCCCTACCGGTTTCATAGTCTTTGTCTAAGTCT
AGTAACCTTACCAGGTTTTATATGAGTGGGATCTCAATCTGGCCCTTAAAAAGATACACAAAGAGTGGGCTGTG
GGTCCCTGGAAGGGGGAGGTTGCCCTTTACAGAACTCACTCGAGGCTTCCAGACGTGTTGGTGTGATGAACA
AGGTTTTTTTACCTTATTTTCTCTTGAACATATCTGAAACCTTCCCCACAATAAGCTGTGCACACCTTTTGT
TCAATCTGAGCTCTTAGTTTATGTCATGGGCTTCTTCACTGCTCTAGGTGCAAGGCTGTGGGAGAGAGAT
GGATTTGGGAGGAGAGAGGAGATGGATTTCAGTTGGGAGTTAGGAGGAGATAGGTGAGATGATCAGACCC
GGAGTTCAACGCTCCAGCAGCTCTTGTTAAAGGAGGGAGCCTGCTGAGCCAGGAGGAGAGAAAGAGATGACCA

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FIGURE 1093B

GCTTGCTAGAAAAATACTTAGCTTTTCTTTTTCTTTTTTTGTGGAGGGGGGACGGAGAGGAACAAGGATGGGGAG
GTAGGAATGAGGTATAGAAAAGAGATAGCATCTTCTTTGGCACAGAATAGTGGCTTACCGCTTACCTTAGAGTT
TTGTTTTTTTTTTTCAAACCCATCAAAATCTACTTATTTATGAATCCAGGGGTGGCAGCATCACTCTGTTCTA
GCATTCTTTGGGAGATGGTCTGGTGCCTAGCTGGGAGTGAGCAGCAGCCATCCCCTGTTCACTTTCTCTAGCC
CATCATTACCTGIGAAGTGCAGTGGGGCAGTCATGGCAAATAGAATTGGGCTGGGGTTTCTCCTTCTTTTCAGTT
CATTGTTGGCCCTGCTAGGAATTAGAAGACAGACACCATGTCCCAGGACAGTGTACTTCTTCTGCATGATGTGT
GGTAGACTCCCTTGTCTGGCTTGTGCAGTGATACTGAGAAAATACATGAACAGAAACTGCCAGGTGGAACAGCA
CGTAACCTAGTGAGTGACTGTACTCCTTTCTAGGAATGCTGATTCAGAGTGCACCTCTTTGACTAGGTCCCAGGA
TCCCCTTGTCCCTGGAGTAGGGACTAACTATAGCACAAAGTAATATGTGCCAATGCTATTTGTGAAATGTTTGGT
CTTTCTAAACGACTAAAGGATTTGTTGGGTTTTTGCTTAAGTTTTGAACCAAATCCTAGAGCCAGCTGATAATAT
TTAATAATCTGGAGGAGAGAATAATGATGTACCAATAAGTGGAGATTCTCCTTATGATGATGCTAGGTTATGG
AAGATGTAAAATATTCAACTTTTTCTCCTTTTTTTGGACTTTGTATTTTACTGCATGTTTTCTTCATTTTAAAT
CAATAAAGAGTAAATTGTC

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FIGURE 1094

MSDSSALPWSINRDDYELQEVIGSGATAVVQAAAYCAPKKEKVAIKRINLEKCQTSMDLLKEIQAMSQCCHHPNI
VSYYSFVVKDELWLVMKLLSGGSVLDI IKHI VAKGEHKSGLDESTIATILREVLEGLLEYLHKNGQIHRDVKAG
NILLGEDGSVQIADFGVSAFLATGGDITRNKVRKTFVGTPCWMAPEVMEQVRGYDFKADIWSFGITAIELATGAA
PYHKYPPMKVLM LTLQNDPPSLETGVQDKEMLK KYGKSF RKMISLCLQKDPEKRPTAAELLRHKFFQKAKNKEFL
QEKTLQRAPTIISERAKKVRVPVGSSGRLHKTEDGGWEWSDDFDEESEEGKAAISQLRSPRVKESISNSELPPTT
DPVGTLLQVPEQISAHLPQPAQGIATQPTQVSLPPTAEPAKTAQALSSGSGSQETKIPISLVLRRLRNSKKELNDI
RFEFTPGRDTAEGVSQELISAGLVDGRDLVIVAANLQKIVEEPQSNRSVIFKLASGVEGSDIPDDGKLIGFAQLS
IS

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FIGURE 1095

ATGCGACCCGACCGCGCTGAGGCTCCAGGACCGCCGCCCATGSGCTGCAGGAGGTCCCGGCGCGGGGTCTGCGGCC
CCGGTCTCCTCCACATCTCCTCCTCCCTGGCTGCTCTCAACATGCGAGTGCAGGCGCGCTGTCTGTGTTCTTG
AACGTGCGGCACAGGTGGCGGCCGACTGGACCGCGTGGCGGAGGATGGACTTTGAGTACTTGGAGATCCGG
CAACTGGAGACACAAGCGGACCCCACTGGCAGGCTGCTGGACGCCGTCGAGGAGCGCCTGGCGCCTCTGTAGGC
CGACTGCTCGAGCTGCTTACCAAGCTGGGCGCGACGACGTGCTGCTGGAGCTGGGACCCAGCATTTGAGGAGGAT
TGCCAAAAGTATATCTTGAAGCAGCAGCAGGAGGAGGCTGAGAAGCCTTTACAGGTGGCCGCTGTAGACACGAT
GTCCACCGGACAGCAGAGCTGGCGGCCATCACCACACTTGTATGACCCCTGGGGCATATGCTGAGCGTTTCGAT
GCCTTCATCTGCTATTGCCCGAGCAGCATCCAGTTTGTGACGAGATGATCCGCACTGGAAACAGACAACTAT
CGACTGAAGTTGTGTGTGTC TGACCCGCGATGCTCGCTGGCAGCTGTGTCTGGTCTATTGCTAGTGAGCTCATC
GAAAGAGGTTGGCGCCGATGGTGGTGGTTGTCTCTGATGATTACCTGCGAGCAGGAAATGTGACTTCCAGACC
AAATTTGCACTCAGCCTCTCTCCAGGTGCCCATCAGAAGCGACTGATCCCCATCAAGTACAAGGCAATGAAGAAA
GAGTCCCCAGCATCTGAGGTTTCACTGCTGTGCGACTACACCAACCCCTGCACCAAACTCTTGGTTCTGGACT
CGCCTTGCCAGGCGCTTGCCCTGCCCTGAGACTGTTCTGAGGCCCTGGGTGTGTGTATCTGTCTGCGCTGTC
CATGTACTTCTGCCCTGCCCTCCCTTTCTGTTGAGGAGGAATCTGTGCTCTACTTACCTTCAATTCCTGGAGA
TGCCAACTTCACAGACAGCTCTGCGACAGCTGGACATCATTTCATGCTCGATGGAACAGTGGCTGTGAGT
GGCATGTCCACTTGTGATTATCAGCCAGGACACTATAGAACAGGACAGCTGAGACTAAGAAGGACAGCAGAGA
GCCAGCTCAGCTCTGAGCCATTACACATCTTACCCTCAGTTTCTCTACTTGAGGAGTGGGATGGGAGAACAG
AGAGTAGCTGTGTTGAATCCTGTAGGAAATGGTGAAGCATAGCTCTGGGTCTCCTGGGGAGACCAAGGCTTGG
CTGCGGGAGAGCTGGCTGTGTGCTGGACTACATGCTGGCCACTGCTGTGACACGACACTGCTGGGGCAGCTTCTT
CCACAGTGATGCCCTACTGATGCTTCACTGCTGTGACACCGCCCACTTCCACTTCTCCTTCCCCACAGGGCAGG
TGGGGAAGCAGTTTGGCCAGCCCAAGGAGACCCCACTTTGAGCCTTATTTCTTAAGGTCACCTCTCATCTG
CATCTTTTACACCTCCAGCTTCTGCCCAACCTTCAGCAGTGACAAGTCCCCAAGAGACTCGCTGAGCAGCTTG
GGCTGCTTTTCACTTCCACCTGTGAGGATGCTGTGTCATGCTCTCAGCTCCACCTGGCATGAGAAGGGATCTG
GGCTCTGGCACTATTCATCAAGTATGAGTTCTGGGGATGAGTCACTGTAATGATGTGAGCAGGGAGCCTTCTCTC
CTGGGCCACCTGCAGAGAGCTTTCCACCAACTTTGTACTTGTATTGCTTACAAAGTTATTGTTTACAAACAG
CGACCATATATAAGCCTCTCTGCCCAAGCTTGTGGGCACATGGGCACATACAGACTCACAACAGACACACA
TATATGTACAGACA TGACTCTCACACACAGGACACGATACACAGTTTTTCTAGGTACAGCTCCACAGGAA
CAGCTAGGTGGGAAAGTCCCATCTGAGGGAGCCTAACCATGTCCCTGAACAAAATTTGGGCACCTCATCTATTC
CTTTTCTTTGTGTGCTTACTACTATTGAACCAAACTCTGSAAGGACCCAAATGTACAGTATTTATACCTCTAAT
GAAGCAGAGAGAGGAAGAGAGCTGCTTAACTACACACAATGAAGTGCAGACACAGCTGTTCTCTCCCTCT
CTCCTTCCAGAGCAATTTATACCTTTACCTCAGGCTGTCTCTGGGGAGAAGGTGGCATGGCTTAGGTGTCTG
TGCCCGAGGACAGACCTTAGACCCCTAAATCCAAATGAGAAAATGCATATCTTTGTCTCCACTTTCAGCCAGGCTGGA
GCAAGGTACCTTTTCTTAGGATCTTGGGAGGGAATGGATGCCCTCTCTGCATGATCTTGTGAGGCACTTTAGCT
GCCATGCACCTGTGCCCTTTAATACTGGGCATTTTAAAGCCATCTCAAGAGCATCTTCTACATGTTTGTAGC
CATTAATAATAATTCAAAGATATCTGAGAAAAGCCGATATTGGCCATTCTTCTATATCTGGAATATATCTGCG
ATCCTGAGTTTATAATAATAATAATTTCTACCTTGGAAAAA

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FIGURE 1096

MAAGGPGAGSAAPVSSISSPLAALNMRVRRRLSLFLNVRTQVAADWTALAEEMDFEYLEIRQLETQADPTGRLL
DAWQGRPGASVGRLELLTKLGRDDVLELGPSIEEDCQKYILKQQQEEAEKPLQVAAVDSSVPRTAELAGITTL
DDPLGHMPERFDAFICYCPSDIQFVQEMIRQLEQTNYRLKLCVSDRDLPGTCVWSIASELIEKRCRMVVVSD
DYLQSKCEDFQTKFALS LSPGAHQKRLIPIKYKAMKKEFPSILRFITVCDYTNPCTKSFWFTRLAKALSLP

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FIGURE 1097

ATGTGGTTCTGCGCGTGTGCGGACGGCTGTCTGTAACTCCGCGGTGAGTTCGCGGACTGGTGGCTGGTCTGCAG
GGTTGACCTGCGCAATGCAGAGGCTGCAGGTAGTGTGCTGGGCCACCTGAGGGGTCCGCGCGATTCCGGCTGGATGC
CGCAGGCCGCGCCTTGCTGAGCGGTGCCCGCAGGCCTCGGCCGCGGACGTGGTGGTGGTGCACGGCGCGCGCA
CGGCCATCTGCCGGCGGGCCGCGCGGCTTCAAGGACACCAACCCCGACGAGCTTCTCTCGGCAGTCATGACCG
CGGTTCTCAAGGACGTGAATCTGAGGCCGGAACAGCTGGGGGACATCTGTGTCGGAATGTGCTGCAGCCTGGGG
CCGGGGCAATCATGGCCGAATCGCCAGTTTCTGAGTGACATCCCGGAGACTGTGCTTTTGCCACTGTCAATA
GACAGTGTTGCTCGGGGCTACAGGCAGTGGCCAGCATAGCAGGTGGGCATCAGAAATGGGTCTTATGACATTGGCA
TGGCCTGTGGGGTGGAGTCCATGTCCCTGGCTGACAGAGGGAACCTTGGAAATATTACTTTCGCGCTTGATGGAGA
AGGAGAAGGCCAGAGATTGCTGATTCTCTATGGGGATAACCTCTGAGAATGTGGCTGAGCGGTTTGGCATTTCAC
GGGAGAAGCAGGATACCTTTGCCCTGGCTTCCAGCAGAAGGCAGCAAGAGCCAGAGCAAGGGCTGTTTCCAAG
CTGAGATTGTGCTGTGACCACCGGTCCATGATGACAAGGGCACCAAGAGGAGCATCACTGTGACCCAGGATG
AGGGTATCCGCCCCAGCACCACCATGGAGGGCCTGGCCAACTGAAGCCTGCCTTCAAGAAAAGATGGTTCTACCA
CAGCTGGAACTCTAGCCAGGTGAGTGATGGGGCAGCTGCCATCCTGCTGGCCGGAGGTCCAAGGCAGAAGAGT
TGGGCCTTCCCATCCTTGGGCTCTGAGGTCTTATGCAGTGGTTGGGGTCCCACCTGACATCATGGGCATTGGAC
CTGCCATATGCCATCCAGTAGCTTTGCAAAAAGCAGGGCTGACAGTGAGTGACGTGGACATCTTCGAGATCAATG
AGGCCCTTTCAGGCCAGGCTGCCTACTGTGTGGAGAAGCTACGACTCCCCCTGAGAAGGTGAACCCCTGGGGG
GTGCAGTGGCCTTAGGGCACCCACTGGGCTGCACTGGGGCACGACAGGTATCAAGCTGCTCAATGAGCTGAAGC
GCCGTGGGAAGAGGGCATAAGGAGTGGTGCCATGTGCATCGGGACTGGAATGGAGCCGCTGCCGTCTTTGAAT
ACCTGGGAAGTCAAGTGAGGTCCCAGGCTGGAGGCCGTACGCAGACAGTCTGCTGCTCTAGCAGCAAGGCAGTA
ACACCACAAAAGCAAAACCATGGAAGAACTCAGCACTGGTGGTGGTGGCAGTGGACAGATCAAGGCACTTCAA
CTCATTTGAAAAATGTGAACACTGATGACATGGTATAGGAGTGGGTGGGGTGTGAGCCACCCATCAGACCCCT
TTAGCTGTGCAAGATAAAAGCAGCCTGGGTACCCAGGCCACAAGGCCATGTTAATCTTAAGCAAGGCCAAT
CCATGGATGAGAAGTGCAATGGGCATAGTAAAGTGATGAATTT

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FIGURE 1098

MQRLQVVLGHLRGPADSGWMPQAAPCLSGAPQASAADV VVVHGRRTAICRAGRGGFKDITPDELLSAVMTAVLKD
VNLRPEQLGDI CVGNVLQPGAGAIMARIAQFLSDIPETVPLSTVNRQCSSGLQAVAS IAGGIRNGSYDIGMACGV
ESMSLADRGNPGNITSLRMEKEKARDCLIPMGITSENVAERFGISREKQDTFALASQQKAAQSKGCFQAEIVP
VTTTVHDDKGTKRSIITVTQDEGIRPSTTMEGLAKLKPAFKKDGSTTAGNSSQVS DGAAAILLARRSKAEELGLPI
LGVLRSYAVVGVPDIMGIGPAYAIPVALQKAGLTVSDVDIFEINEAFASQAAYCVEKLRLPPEKVNPLGGAVAL
GHPLGCTGARQVITLLNELKRRGKRAYGVVSMCIGTGMGAAAVFEYPGN

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FIGURE 1099

GTTCTCCGGGAGCCCAACACCGTTCCCGCGGGCCACGATGATCCCTCCGAGCAGCCCCGCGAGGACGGCGTG
GACGGGCTGCCAAGGAGGGCGTGGGGCCCGAGCAACCCGCTCTCTGATCCACAGCAGCCAGGAATCCAAG
CTCCAGAACTAAAACGATCACTTTCTTTCAAGACCAAGATTTACGGAGCAAAAGTGCTGACAACTTCTTCAG
CGAACCAACAGCGAAGACATGAACTGCAAGCACACATGGTGGCTGAGATCAGCCCCAGCTCCAGCCCACTCCCT
GCTCCAGGAAGCCTGACGTCCACACCCCGCAGGGCTGGTCTGCATCCAGGTGGCAAGGCTCATGCGTTTCAGGAA
TACATCTTTCAAGAAGCCCACTTTCTGTGATGTCTGCAACCCACATGATAGTGGGAACAAATGCTAAGCATGGACTG
CGCTGCAAAAGCCTGTAAGATGAGCATCCACCAAGTGACACAGATGGCCTGGCACCCACAGCGGTGCATGGGCAAG
CTGCCAAAGGGGTTTCGGCGTTACTACAGCTCCCCCTTGCTCAITCATGAACAGTTTGGCTGCATTAAAGAAATT
ATGCCCATTTGCTGTGGCAATAAGGTGGACCTGTCTACGAGACCTCCGCTTCGGCACCTCCCTGGGCCAGAGG
ACAAGAAGGGCAGCTCCGGCAGTGGCTCTGACTACCTCACAGAACCTCTACTTCAGATCTTGTGGAGGTTCTCT
GAGGAAGCCAAATGGGCCAGGAGCGGGTATGACCTAAGGAACGCAGCAACAGCGGTGTTACATATCCAGAAAAAT.
GGCACTGATGATTTACAGAGATCCAGCGAAGAACATAAACCCACAGGGATCTCTTTCCAAAGACCCATTACAGATG
AACACCTATGTTGCCCTTGTAACAATTTGTACCACAGGAGATGAAGATTTGGAATGAGGCCAGGAGACATAATT
ACTCTTTTAGAGGATTCCAATGAAGACTGGTGGAAAGGGGAAAATTCAGACAGAATTGGCTTCTTTCAGCCAAAC
TTTGTTCAGAGACTACAACAAATGAGAAGATTTTAGATGTGTTAGAACCTTCATTGGGTGTAAAGAACAGGGG
CAGATAACACTGAAAGAGAATCAGATCTGCGTGAGTTCTGAAGAAGAACAGATGGTTTTATCAGAGCTCCTCAGT
GGAAAAAAGAAAGCCCTCATCCCCCTTGATGTACTAGAAAACATCTGATGTTGGTGGCTCCTCCGTTTGGCAGTA
GGCAAGCTCTGCTGCGATGCCCTCGCCTCATCTCACACTCGGTCAACCCAAAGAGCTGGCGCACTGCCAGGCC
CCCCAGGAACAGCTGAGCAAGAATCAAGTATCTGAGACTGTGGAGTAATAGCCACAAAACAGAGGGGCCACTGC
ACAGCATATCCAGGCTGACACAGGTGGGACGAGGCTGAGAGAGTCAGCAGGCAGAGCCAGATGCCATGCTTGGC
ACGACAGTAGTACCTATAAACACAGCTGTCCCCAGGATCCCACTCCTTTCTGTCTGTGGTGAAGTTAAC
ACACTGGAGTGTGCTCCAGTTTGACGGGTAGCCAGTGCAGAGTTTCAGATCCATGTAGCTAAGTATATCTCTGCT
TCCAGACCTATGTCAACAGTACCAATCAGTCAGTGCATCACATTTTCAGGCCCAAGCAATCTCTGTGCAAGCA
TCAGAAAGACTGCTTCCAGCCCCCAGCATTCCAGTGCTCTCCAGGCTTCTCTCTTTGTGATTGTGCTGTCCA
GAGTGTCCAGCTTGTCTTCTTTCTCTTCAGTCTCTGAGTACATCTGGTGGTGTGCATTAGATGTGAGGGCTA
TGTTGACATGGCATACCTCCAAAGACCTGACCTGCCTAAAGACTGATGACAGGCCATCCTTCCTGCTGTTCTAG
GTACTGGCCTGGGTGACAGGACAGGACATGAGACATAGATACAGTGGGAGGAGAAGTGGGGAAGGGTGGAGCAG
AGAGTTCTTACTTATTGAAGATTATACAGCCCTTTTCGGTTATGAAGTCCCTGCTTGAAGGCAATGGACCTGGGGA
AGAGACTATCAAAAAGTCTCCATTTTCAATTTTACATCCTCTCTATTGGAGGACAGCACTTTCCCTCATGCTGT
CCTATAGGACTCCACTTTGAAGTGTGCTACGTTGCAGGGAACATAGGAACATGGAGGGGAACCAACACAGCA
TCTTAGAAGAAATGTAGCCAAATTTGGAGTCCATCTTCTTTAGGCGAGTATATGAATCCTAGCAGATGTAATAAT
GGAAAAGAAATCCTAATGCTTCTTCTTTCAGAAAGTAGAGGAACACTAGGGGCCAATTAGCATCATCTAGGGGAATC
TCTATTACTCTGACTTATATCAATGTTTACAAGAAATGCAATATACCTGTGATGCCTTCTACTCAAGCCTCCTAG
CATTCAACTTCCATCCTATTAGTCAATTAACGTGGTTAACTTCAATTCACATCACCTTCAAGTCAATGTGAGT
TTGATTTATTTTGTACAGAGCAATAAATCATTAGAACAAATGGTTTTAAAGACTTAAGTGGATGATCCAT
GCATGTGAAGCATTATTTCCCAACCAAAAGCATCATTATCTCCATTTATTTCTTGTTCGCCGTGAGTGAAG
TTGGGAATCAGGAGATGGCTGCTGGTTTACAGAAGTTTGGATGCCTTACTCTTATCTTAAAGCCAGCATCC
AGAATTTCTCCCTCTCTGATGCCACATGCAAAACAGGTGTACGATGTCAAGATGGATTCTTTGAGAGCCAGGG
TAGATCATATGCTGCCTTCTGTAAATTTGGATGGCTAGTACAAATGCTCTTTCCTCTAATTCAATTCATCCAT
TTAATAAAAACATACTGGCTGGAAGGAGCATCAG

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FIGURE 1100

MIPFSSPREDGVDGLPKEAVGAEQPPSPASTSSQESKLOKLKRSLSFKTKSLRSKSADNFFQRTNSEDMLQAHM
VAEISPPSSPLPAPGSLTSTPARAGLHPGGKAHAFQEYIFKKPTFCDVCNHMIVGTNAKHGLRCKACKMSIHHKC
TDGLAPQRCMGKLPKGFRYYSSPLLIHQFGCIKEVMPIACGNKVDPVYETLRFGTSLAQRTKKGSSGSGSDSP
HRTSTSDLVEVP EEANGPGGYDLRRKSNSVFTYPENGTDDEFDPKAKNINHQSLSKDPQMNTYVALYKFVPQE
NEDLEMRPGDIITLLEDSNEDWWKGKIQDRIGFFPANFVQRLQQNEKIFRCVRTFIGCKEQGQITLKENQICVSS
EEEQDGFIRVLSGKKKGLIPLDVLENI

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FIGURE 1101

GCCGCGGGCTTCGTTTGTGAGGAAGGGGCCATAGGCCGGGGCTGCGGTGGTGGGGGTTGCTGCGCGCCGGGGGT
CGCTCCTGCTGTGTCTTCGCTCCAGCTTCGCCCACTTCCCTTGCCAGCGGGGTGGGCGCGGAGAAGACCTGCC
GGAGCCATCGGAGGACGAAGTGGTCCGCTTGCCAAAGAAGATGGCAAGATGGTGCAAGAAGAACGGCGCTGGA
GCATTGGATTGTGTAAGGAGCTTAAGAATATTCCTATGACCCTGGAATTACTGCAGTCCACAAGAAATCGGAATG
TCAGTTAATGCTATTTCGAAGCAGAGTACAGATGAGGAAGTTACATCTTTGGCAAAGTCTCTCATCAAATCCTGG
AAAAAATTATTAGATGGGCCATCAACTGAGAAAGACCTTGACGAAAAGAAGAAAGAACCTGCAATTACATCGCAG
AACAGCCCTGAGGCAAGAGAAGAAAGTACTTCCAGCGGCAATGTAAGCAACAGAAAGGATGAGACAAATGCTCGA
GATACTTATGTTTCATCCTTTCCTCGGGCACCAAGCACTTCTGATTCTGTGCAGTTGAAGTGTAGGGAGATGCTT
GCTGCAGCTCTTCGAACAGGGGATGACTACATTGCAATTGGAGCTGATGAGGAAGAATTAGGATCTCAAATTGAA
GAAGCTATATATCAAGAAATAGGAATACAGACATGAAATACAAAATAGAGTACGAAGTAGGATATCAAATCTT
AAAGATGCAAAAAATCCAAATTTAAGGAAAAATGTCTCTGTGGGAATATCTCTGACTTATTGCTAGAATG
ACAGCAGAGGAAATGGCTAGTGATGAGCTGAAAGAGATGTGGA AAACTTGACCAAGAAGCCATCAGAGAGCAT
CAGATGGCCAAGACTGGTGGGACCCAGACTGACTTGTTCACATGTGGCAATGTAAAAAGAAGAAATGCACTTAC
ACACAGGTACAAACCCGAGTGTCTGATGAACCAAGTACAACTTTGTTGCTGTAATGAATGTGGAATCGATGG
AAGTTCTGTTGAGTTGGAAGAATTGGCAAAATATCTGGACCATTAAGAAAAACGGATTTGTAACTAGCTTTAAAC
TAGGCCAAGCAACTAGTTTTCTGCAAAATCAAATTTTAAAGCAACTTGAGTTAGACTTTGTTTTGACCTAACCA
TCCCTTCCCTAAATGCCTTCTGTAGTTTTCAGATCAGTAGGGAGCCATATAATAATGTATGGTACCTGTTTCAA
AACATATTTTTCTGTTTTTATAAGTAAGTTGATTAATAATAAATCTTTGGCAATATTTCTTCTTTCTTAAAGGA
AAATACACCTTAACTTTTTTCTTTTAACTGTGAACATACACAGTAGAAATCTGTACTCTCTGTTATTAAAT
ACATAAATGAAAATACTTTTTTCCATATGGCGATGTAGCTACAAATATTAAGGAGGAGAAAAAGGTAATATA
TTTTAGGTTTACCAAATATGGTGTGATTCAAATAATCTTGACCAGCTTATCAAAAATGTACATAAATTTTGAGG
TAGCTTATGAATTTGATTTTAAATTTATGTTTCAAGCTTGGAAATATTAGATATTTTGTACTCTGTAACATAA
CCGTGATCATCATCTCTTGTAAATTTCTGTGATGATATTAATCTTGTCTTAAATAGATTTTTGGAAACCAAGACTT
TATTGAGATCAGTTTGGTTTTCTGTAAATTTACCTGTTTGACTTTATAATGTGTTTTAGTTTTGCAGAAAGAACA
CTGTTGTAGTTTGAAGAGCTTTTCATAAATCCCTCATAGGCAAGATGAGAAGTCCCACTATTTTTTCCCTCT
CTTAGGAAGACATCTGGAAGAAAAATGTTTAGCATCTTAGTGATGATAGTATTGTAAACAGTTTCATGACTAG
ATTTTGATTTCGGAATCTATCTAGCAACAGGATTAATCTTAAGGACTGTATAATTCATTAAGCGGTGGTCTTTC
CATGTGGAGACTGATAGAAAATAATTTTGTCCCAAGCTTATTGTGCTGACTTTTTCTGCTCAATGAGTGAGATTGT
TGAACAACTGAATATATGGGCTATAGCAAGTAGCTTTACAGTACAGATCTTACAAATTAAGTTTTGCTTTTGTTA
AAGTGTGACCATTTTTTCTGTTTGGAGTAAGCAAAAAATGTTTGTACATAGGTTCCCTAGGGTACACTGTGCT
TAGCATACTTTTAAAGGCCACTGTTGCAAGTCTACATTTTATGCTGAATCTGCATCTGTGACGCAACCGTAGAA
AGACCTCAGTACATGCTTTGCACCTCTCCTTTGCTCCCTTTTCCAATTTCTTATTGCATATCTTTTGTGTAAT
ACAGAAGCAGCATTTTTAAATGTCCATGTTAAGAATGGCCCACTGGTACCGACTCACCTCTATTTTGTGAGTT
CATAGTTGAAGATTTTGTTTTTATTTCAAAAACAAAGTACATTTTGAATAATGTTTCAGAATAAAATAATCTCA
CTTTTAAATTAAGTGATCCATTTTAAATTTGTAATTCATAAAGTTTTTTTTGTGTTAAACAT

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FIGURE 1102

MEDEVVRFakkMDKMVQKKNAAGALDLLKELKNIPMTLELLQSTRIGMSVNAIRKQSTDEEVTSLAKSLIKSWKK
LLDGPSTeKDLDEKKKEPAITSQNSPEAREESTSSGNVSNRKDETNARDTYVSSFPRAPSTSDSVQLKCREMLAA
ALRTGDDYIAIGADEEELGSQIEEAIYQEIrnTDMKYKNRVRSRISNLKDAKNPNLRKNVLCGNIPDPLFARMTA
EEMASDELKEMWKNLTKEAIREHQMAKTGGTQTDLFTCGKCKKKNCYTTQVQTRSADEPVITFVVCNECGNRWKF
C

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FIGURE 1103

AGGTCACCACCGCTCCTACCAGCAGCCTGACCCAGGATGCTCTACTCCCCAGCCTTCAATCCCTGGACCTGGGT
TGGAAATTAGGAGACTTCCGTCGAGGGTCAATTGTGCGGGATCCTGGCCATTCCATACAAAATCTCAGACTGGCA
AAGAGAGGGGGACCCCTCGAGCAGAGGTAGATATCAAGGGACCCGGGTTTTCCACCCCGCCCTCATTGCC
AGCGTGGGGTCTCAGATGAGTGGGAAAACCTCAAAATGGATCAGAAAATCATGCAAGTTCGGACTCTGGCCCTTAG
GAGAAAACCTCTTACCGGAGATGGAATGTCACGAGGGATCCAGCCACCCCCATCCACTCATTGACTGGATGAAGTT
TTGCGATGGGAAAATCCAGGTACAGGATTACGGACGACCTGCACCCGCCGGAGCTCCTTCTGGGTCGGAGTTTG
GGAAAAGTTCGGGTTAGGGGTTAAAGGTCAGGGAAGAACTTCCCCACTCCCCCGCCTCTTTCGTCCGCGGGCCG
GTTCAAGAGGTATTCCGAACACAGGGGAGGAGAGCGCGGCCATCGTACCTGAGCAGGAGCCAGCGCCTGCTGGAG
CTGCTGCTGCTCCTCGCTGATCTTTTGCTTCAGTTTCTTGAACATGGCGCAGCGTACGTACGGTCTTGAGTGTCA
ACGAAAACCTGAAGGGCGAGAGCCCGGGGAGTCCCGGCCGCGACGGCTACGGCGACTTCTTTACACAGGGGACAGC
GGGGGCGGGCCTCGCGTCTCCTCTTGAGGCTGTGGCAAGTCCGGACACTCGTCTGAGGGTGTCCGCGCTCG
CCGCGCGCGCTCTCTTTCTCCGGTGCCACTGGCTGGCCTCGGCCCCCACTCCAGCCCCGGAGCCGCGCGG
CGACGACAACGGCAGCAGGTGAATGTGCGCCAAGGGCGCTTGCGCGGCTACGTGGAGCTCACAGAGGCTAACT
ACGGAGCACCCGATGGGACAAGCACAATGTGGGTCGCCACATGCGCGCTCGGCGGTCGCTTCCGAATCGCT
GCATCGGAGGACGAAGGTTTCGGTCTGCTGATTTTCGTTGCGTGCAGGAGACCCGCTCGCGGCTCAGAACC
GCGTGGGCTAGTCTGAACACTACCTGACTCTCACCTGGGCTTTGGCCCTCGAAAATCAGACGGGGAGAGTGTCTG
CTTCTATCGATGGCAGCAGGGCCGACGGGCCACCCGCAAGAACAACAGGGATGAGCGTCAAGGATGGGAGAAGGG
GAGATCCAGAGAACCTGACGCGGGCCCTAATTGATAGTGTCTTTCTTTAGTAGCTGATAGGATTCTGTGT
CTTCGGTGCCAGAGGGGCCCGCTTCCCTTCCCTGAACTCTTCCAGCGTCGGGAAGTCCCTGATACACGGCGCCAG
GGGTCCAAATGTTTTATGCCAATCTGTAAAACCTCAAGTGTGTGGACACCTGCTTTATCTTTCTTACC
ATCGTGTATTTACGAATTCATCAAAAACCTTTATCAGGCTTGGAGATGTTAAAAGAAATTACAGCCTAGTGG
AAGACACAGATTCTTAATTAGTCCAAATTTACTCCTAACACCTGCAATCATCCTACAAGATCTTAATGTTTATGT
GCCTCATTTATCTAAACCCCTGAACCTTTGGCTGCCTGTGAATCCTCAGGTCCATTTCAGCAACCCACTTTTG
GCTGTACCTTTGATATCATCTGAAACTGCTTACATTGTCTCCGGTATCAGAATCTAACAGTATATGCTGATCTCC
ACGTTCTAGCAAATTTGTTTACCAGCAATAATAGGAGCAACCTGCTCTCGAGAGTCCATATTCTGATCCCTAAA
TGATTATAGAGCCACAGTGGGGCTTGAACACTGCCTTAAACCTTGGGCTAAGTCTCTTATATCTCTGCTAGTGAAC
ACCTTATGTATGTAAGGTGTCCCGACGCCCGGGCCACAACGGGTACCGACCCATGGCCTGTTAGGAACCGGGC
TACACAGCAAGAAGTGAATCTTGCGCAAGCCAGGGAAGCTTAATCTGTATTTACAGCTGCTCCCCATGGTTTACA
TTATCTGTCTGAGCTCCACCTCCTGTGTCAGATCAGCTGTGGCATGAGATTCTCATAGGAGCTGGAACACTGTGAAC
TAGGCGATGAGAGGGATCTAGGTTATGCTCCTTATGAGAATCTAATGCCTGATGATCTGTCACTGTCTCCATCAC
CCCCAGATGGGACATCTAGTTGCGAGGAAAATAGCTCAGGGCTCCACCAGTCTCTCATATTGTTGAGTTGTGT
AATTGTTTCATTATATATTACAATGCAATAATAGAAATAAAGGGCACAATAATAT

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FIGURE 1104

MALLPSLQSLDLGLELGDFRGSIVRDPGHSIQNLTTGKREGDPSSRGQISQGTRVFFPRPHSQRCVSEWENLK
YGSEIMQVRTLALGENS

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FIGURE 1105

CTCTTCCGGTTCTAGGTGCTTCGGGAGCCGCGGCTTAAGGTGTAGACATGGCGAAGTCCAAGAACCACACCACAC
ACAACCAGTCCCGAAAAATGGCACAGAAATGGTATCAAGAAACCCCGATCACAAGATACGAATCTCTTAAGGGGG
TGGACCCCAAGTTCTTGAGGAACATGCACCTTTGCCAAGAAGCACACAAGAAGGGCTAAAGAAGATGCAGGCCA
ACAAATGCCAAGGCCATGAGTGCACGTGCCGAGGCTATCAAGGCCCTCGTAAAGCCCAGGAGGGTTAAGCCCAAGA
TCCCAAAGGGTGTGAGCCGCAAGCTCGATCGACTTGCCTACATTGCCCATCCCAAGCTTGGGAAGCGTGTCTGTG
CCCGTATTGCCAAGGGGCTCAGGCTGTGCCGGCCAAAGGCCAAGGCCAAGGATCAAACCAAGGCCAGGCTGCAG
CTCCACCTTCAGTTCCAGCTCAGGCTCCCAAAGGTGCCAGGCCCTACAAAGGCTTCAGAGTAGATATCTCTGC
CAACATGAGGACAGAAGGACTGGTGTGACCCCTACCCCGCCCTGGGCTACCATCTGCATGGGGCTGGTCTCTC
CTGTGCTATTTGTACAAATAAACCTGAGGCAGG

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FIGURE 1106

ATTGCCACATGGTCCACATTGCATGCAAGATTGCTGAGCTGAAGAAAAGATTGATTGCCGTTCTGGTAAAAAGC
CAGAAGATTGCCCTAAATTCTTGAAGTCTGATGATGCTGCCATCATTGACATGGTTCCTGGCAAGCCCATGTGIG
TTGAGAGCTTCTCAGAACTGTTTGTTCATTGGCCATTAAAGTTTAGTAGTAAAAGACTGGTTAATGATAACAA
TGCATCATAAACCTTCAGATGGAAAGGAGAAATGTTTGTGGACCACTTTGGTTTTCTTTTTTGCATCTGGCAGT
TTTAAGTATTATTAGTTTTTAAATCAGTACTTTTTAAATGGAA

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FIGURE 1107

MVHIACKIAELKEKIDCRSGKKPEDCPKFLKSDDAAIIDMVPGKPMCVEFSSELFVSIGHLSLVVKDWLMTMHH
KIFRWKGECFVDHFGFLFCIWQF

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FIGURE 1108

TGCCCTGTCTTTTCCGIGCTACCTGCAGAGGGGTCCATACGGCGTTGTTCTGGATTCCCGTCGTAACCTAAAGGGA
AACTTTACAAATGTCGGAGCCCTTGATGTCTGCAAAATGAAGGAGGAGGATGCTCTTAAGTTTCCTTGACGACAGG
AACCACITTAGGTGGCACC AATCTTGACTTCCAGATGGAACAGTACATCTATAAAAGGAAAAGTGATGGCATCTA
TATCATAAACTCAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTCGTGCAATTGTTGCCATTGAAAACCTTGC
TGATGTGAGTGTATATCTCCAGGAATACTGGCCAGAGGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCAC
TCCAATTGCTGGCCCTTCACTCTTGGAACTTCACTAACCAGATCCAGGCAGCCTTCCGGGAGCCACGGCTTCT
TGTGGTTACTGACCCAGGGCTGACCACCAGCCTCTCACGGAGGCATCTTATGTTAACTACCTACCATTTGCGCT
GTGTAACACAGATTCTCTCTGCGCTATGTGGACATTGCCATCCCATGCAACAACAGGGAGCTCACTCAGTGGG
TTTAATGTGGTGGATGCTGGCTCGGGAAGTTCTGCGCATGCTGGCACCATTTCCTGTAACACCCATGGGAGGT
CATGCTGATCTGTACTTCTACAGAGATCCTGAAGAGATTGAAAAGAAGAGCAGGCTGCTGCTGAGAAGGCAGT
GACCAAGGAGGAATTTAGGGTGAATGGAATGCTGCCGCTCCTGAGTTCACTGCTACTCAGCCTGAGGTTGCAGA
CTGGTCTGAAGGTGTACAGGTGCCCTCTGTGCTATTACGCAATTCCTACTGAAGACTGGAGCGCTCAGCCTGC
CACGGAAGACTGGTCTGCAGCTCCCAGTCTCAGGCCACTGAATGGGTAGGAGCAACCAGTACTGCTGGTCTTAAGC
TGTTCTTGACATAGGCTCTTAAGCAGCATGGA AAAATGGTTGATGGAAAATAAACATCAGTTTCT

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FIGURE 1109

MSGALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMEQYIYKRKSDGIYIINLKRTWEKLLLAARAIVAIENPADVS
VISSRNIGQRAVLKFAAATGATPIAGRFTPGFTTNQIQAAFREPRLVVTDPRAHQPLTEASYVNLPTIALCNT
DSPLRYVDIAIPCNNKGAHSVGLMWMLAREVLRMRGTISRHPWEVMPDLYFYRDPPEIEKEEQAAAEKAVITKE
EFQGEWTAPAPEFTATQPEVADWSEGVQVPSVPIQQFPTEDWSAQPATDWSAAPTAQATEWVGATTDWS

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[illegible]

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FIGURE 1111

MVFRREVEVGRVAYVSFGPHAGKLVAIVDVIDQNRALVDGPCTQVRRQAMPFFKCMQLTDFILKFFHSAHQKYVRQ
AWQKADINTKWAATRWAKKIEARERKAKMTDFDRFKVMKAKKMRNRI IKNEVKKLQKAALLKASP KKAPGKGTGA
AAAAAAAAAAKVPAKKITAASKKAPAKQVPAQKATGQKAAPAPKAQKGQKAPAKAPKASGKKA

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FIGURE 1112

GACTCCTAGGGGCTTGCACTAGTGGGAGAGAAAGAACATCGCAGCAGCCAGGCAGAACAGGACAGGTGAGGT
GCAGGCTGGCTTTCTCTCGCAGCGCGGTGTGGAGTCTGTCTTGCTCAGGGCTTTTCGGAGCCTGGATCCTCA
AGGAACAAGTAGACTTGGCCCGGGGAGTGGGAGGGAAGGGGTGTCTATTGGGCAACAGGCGGGGCGAAAGCCC
TGAATAAAGGGGCGCAGGGCAGGCGCAAGTGGCAGAGCCTTCGTTTGCACAGTCCGCTCAGACC6CAGACATGA
AACTTGTCTTCTCTGCTGTCTGTCTCTCGGGGCCCTCGGACTGTGTCTGGCTGGCGTAGGAGGAGTGTTCAGT
GGTGGCGCGTATCCCAACCCGAGGCCACAAAATGCTTCCAATGGCAAGGAATATGAGAAAAGTGCCTGGCCCTC
CTGTCACTGCATAAAGAGAGACTCCCCCATCAGTGTATCCAGGCCATTGCGGAAAACAGGGCCGATGCTGTGA
CCCTTGATGGTGGTTTCATATACGAGGCAGGCCCTGGGCCCTACAAAATGCGACCTGTAGCGGGCGAAGTCTACG
GGACCGAAAGACAGCCACGAATCACTATTATGCCGTGGCTGTGGTGAAGAAGGGCGGCAGCTTTCAGCTGAACG
AACTGCAAGGTCIGAAGTCTTGCCACACAGGCCTTCGACAGGACCGCTGGATGGAATGTCCTATAGGGACACTTC
GTCCATTCTTGAATTGGACGGGTCCACCTGAGCCCATTGAGGCAGCTGTGGCCAGGTTCTTCTCAGCCAGCTGTG
TTCCCGGTGCAGATAAAGGACAGTTCGCCAACCTGTGTGCGCTGTGTGCGGGGACAGGGGAAAACAAATGTGCCT
TCTCTCCCAGGAACCGTACTTCAGCTACTCTGGTGCCCTCAAGTGTCTGAGAGACGGGGCTGGAGACGTGGCTT
TTATCAGAGAGAGACAGTGTTTGAGGACCTGTACAGCAGGCTGAAAGGGACAGTATGAGTTACTCTGCCCAG
ACAACACTCGGAAGCCAGTGGACAAGTTCAAAGACTGCCATCTGGCCCCGGTCCCTTCTCATGCCGTTGTGGCAC
GAAGTGTGAATGGCAAGGAGGATGCCATCTGGAATCTTCTCCGCCAGGCACAGGAAAAGTTGGAAAGGACAAGT
CACCAGAAATCCAGCTCTTTGGCTCCCTAGTGGGCAAGAAATCTGCTGTTCAGGACTCTGCCATTGGGTTTT
CGAGGGTGCCCCCGAGGATAGATTCTGGGCTGTACCTTGGCTCCGGCTACTTCACTGCCATCCAGAACTTGAGGA
AAAGTGAGGAGGAAGTGGCTCCCCGGCTGCGCGGCTGTGTGGTGTGCGGTGGGCGAGCAGGAGCTGCGCAAGT
GTAACCAAGTGGAGTGGCTTGAGCGAAGGCAGCGTGACCTGTCTCCGCGCTCCACCACAGAGGACTGCATCGCC
TGGTGCTGAAAGGACAAGCTGATGCCATGAGTTTGGATGGAGGATATGCTCACTGACAGTGCAGGCAAAATGTGGTTGG
TGCTGTCTGGCAGAGAACTACAAAATCCCAACAAAGCAGTGACCTGATCTTAAGTGTGTGATAGACCTGTGG
AAGGATATCTGTCTGTGGCGGTGGTTAGGAGATCAGACACTAGCCTTACCTGGAAGTCTGTGAAAGGCAAGAAGT
CCTGCCACACCGCCCTGGACAGGACTGCAGGCTGGAATATCCCATGGGCTGCTCTTCAACCAAGCAGGGCTCCT
GCAAAATTTGATGAATATTTCACTCAAGCTGTGCCCTGGGTCTGACCCGAGATCTAATCTCTGTGCTCTGTGTA
TTGGCGCAGCAGCGGGTGAGAAATAGTGGCTGCCAACAGCAACGAGAGATACTACGGCTACACTGGGGCTTTCC
GGTGCTGGCTGAGAAATGCTGGAGACGTTGCATTTGTGAAGATGTCACTGTCTTGCAGAACACTGATGGAATA
ACAATGACGATGGGCTAAGGATTTGAAGCTGGCAGACTTTCGCTGCTGTGCTCGATGGCAACGGAAGCCTG
TGACTGAGGCTAGAAGCTGCCATCTTGCCATGGCCCGAATCATGCGGTGGTGTCTCGGATGGATAAGGTGGAAC
GGCTGAAACAGGTGTTGTCTCCACCAACAGGCTAAATTTGGGAGAAATGGATCTGACTGCCCGGACAAAGTTTGTCT
TATTCAGTCTGAACCAAAAACCTTCTGTTCATGACAACACTGAGTGTCTGGCCAGACTCCATGGCAAAACA
CATATGAAAATATTTGGGACCAAGTATGTCGAGGCATTACTAATCTGAAAAGTGTCTCACTCCCCCTCC
TGAAGCCTGTGAATTCCTCAGGAAGTAAAACCGAAGAAGATGGCCAGCTCCCCAAGAAAGCTCAGCCATTCA
CTGCCCCAGCTCTTCTCCCGAGGTGTGTGGGGCTTGGCTCCCTGCTGAAGGTGGGGTGTGCCATCCATC
TGCTTACAATTCCTGTCTGTCTTAGCAAGAAGTAAAATGAGAAATTTGTGTGATATTC

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FIGURE 1113

GCTTCTAAACAACCTACCCCTCCTTCCCCATTTTCTGTGGTCCAACCTACCCCTCGGCGATCCGAGGCTTGGCGGGGC
ACCGCCTGGGCTCTCCCGTTCCCTTAGGCTGCGCGCGCTGCCCTGCCGCACTGGCAGAGTTGGGCGCTAAATGAGCA
CCATCAAAATGAAGTTATTAATATATGCGTTTGTCTGTTCAAAGAGAGGCTTGAGACTCAAAAACCTAGATTCT
CTGCTTCCAAGACCTCAAGGAGAGCAGGCTGGTGGAGGACACCTTACCATAGATGAAGTCTCTGAAGTCTCTCAA
TGGATTACAAGCTGTGGTTTCATAGTGAGGTGGAATCTGAGCTCATCAACACTGCCTATACCAATGTGTACTTCT
CGCACAGCTGTTTGACAAAGCTGAGAAGTGGTATCTTAAGCTACAGACAGACATCTCTGAACTTGAAAACCGAGA
ATTATTAGAACAAGTTGCAAGATTTGAAAAGCAGAGATTACATCTTCAAAACAAAAGGCCATCTTAGATGTCAC
AAAGCCAAAACCTTGCTCCACTTAATGAAGGTGGAACAGCAGAACTCCTAAACAAGGAAATTTTAAGACTTCAAGA
AGAGAATGAGAAATGAAGTCAAGGTTGAAGACCATTGAAATACAGGCTACAAATGCACCTGGATGAAAAGTCARA
ACTAGAAAAAGCACTGCAAGATTTACAGCTTGATCAGGAATCAAAAGGATTTTATAAAGGCCCAAGACTTAAG
TAACCTTAGAAAAACACTGTCGCTGCCTTAAAGAGTGAGTTTCAGAAGACACTTAATGACAAGACAGAAAACCGAA
GTCACCTGGAGGAGAATCTGGCGACAGCCAAGCACGATCTACTCAGGGTTCAGGAGCAGCTGCACATGGCTGAAAA
GGAATTAGAAAAGAAATTTGACGAAACAGCAGCTTATCGAAACATGAAAAGACTCTTACCAAGAAGAAATGACCA
AATCAAAGATCTGAGGAAAAGACTGGCACAATATGAACCTGAAGATTAAACCTGAAGATTTCTCTGGAAGCTAC
CACATGCAACATACAAGCAAGCTCTACCTCAGGCAGTGATTTTGAAGAGCATTTTGTCTATCTCCCTCTCCTTAT
TTTTCTAATATTAGACTTTGAATTTTAGAACTAGAGTTCTCTATTTGACGTAGTTGAAAACAGAGAAAACCTGA
GTGATTCGTCTGGTCATCCCAACACACTCTCTACTGAGTGCTCCAGAGTCTTAGCTCATGTCAGCTGAGAATTC
TTTACAGCAAGAAGAGATTTTAGAGTGGGAAGAAGAGGCTTATCTCTGCTATTAGTATAAGAGCTCTGTATT
TTTTAATAATGTTTAAATAAGCTAACAAATGTTTGTACTTATGCATTTCCCTAGGGTAAAAATAAATAGTAGCATG
TTAAAGATAGTTATTACCAAAAAAGAGAGTTATTACAATAAATAATGCTCTCTTATTTTTAAAAATGAAATCTT
AATTCATTACTCTATTTGATGATATAAATAATAAATCATTGAAAATGTGAATTCATTATGGGTAGCCTTTTTCAC
CAATTATAAGGAAAAATTTACAGCAGTGAACATGAACATTCACCTAGCTTCTCAGTCTCTCCATCTTAAAGATCA
TTATCAGAGGAGGTTTCAGCATTTTTCGAGCATAACTTTTCATGAGTCTGTATTACTAATGGATAAGTCAAATC
CATCCTGCACCTCTACAGTTTAGAAAGTATCTGGACTCAGAATAAATGTAATTTTATACCTGTTTCCAGAATGT
TATTTTACATTTTATGTTCATATAAGAACACTTTTAAAAGACGTATATTCAACATAAAATCAGCTATGCACACTC
AGATTAGACTTTTATGTGGGTCTATAATAATTGTATTTTCAAGAGGTTTTCACATATATTGTGTATGGCCGTGG
TTTTCTCAGACGATTTTGGACAATCATTAGAAACTGGGCATCATATCCACAGTTATGTAAGGCAGTGATATACT
ATAAGGATAAAACAAAGTCAAGTCCATAAAGCAATAATCCCTCAGAAGGAAAGTCCTTACTTTTACATATTAATA
TTTAGTAATTTTCTCGCTCTTAAAGTGAGAGTATCACACCCTAAATGAACATCTCTACTAAGAGACATTCATT
CCATTTCCCAAAATGAAGATTTTATCCAAGAAACAGAGTTTACTGATTGGAGCATAAGGCTGTGTTGTTATTTA
TCAAGCTTTTAAATAGCCTTGAATTTATTATTTTCTTATAGGCTTTTGTGTAATAAGTGAAGGAACAAT
GTTAAAGGGTAAAGATAATTTCCCTGCAAAAGGACACAGAAGGCAGTCTTAAGAAGATGAATGGATGAGAGAAGGG
AGAGAATAAAATGCAATAAGCAGGCAGCATTTACTATGATTTTCTCCCTACCTGTCTCTCATATTTAGGTAC
TTCACAGTTTCTGTGCCCTTTTGAGAGCTTTTGTGAGGGCTCATTCTACCCCTGATTTTCTTAGCCCTAAATGT
GACACTCTCTCCAAAAATCCATTCCATTGCTGTGGACCAAGATGTTCTATGTAATTCAGAAGCAGAACTCTTGG
CTAAAGGGCTAGTGTGGCTTCGAAACCATTCAATTTTCTCCCTACACCTTTGTGAGTTTGAACCCAGTGA
GGAAAAAGGTATGTTGATAAGAAACCTTATTTGCTAGGTAGAATTTGACTGGTTTCTTGGTGAAGTTTGTGA
AATATTCTGTACAGTACGTTCCATTGTTTAAATAAATAAATCAAAAAATATTTCTAAACCTTTAAACCAACTATG
CCAGCAATTAAGATAACAATAATGATGTTCTTTGACGTAAATCAACGTGATGTTCTTTCACATGTAACACAT
TTTAGTGTCTCTGTTTGTGCTATTTTGTGTTGTGTTGTTGTTGTTTATTACTCTATACCCCTTAGCAAAAATAC
AGTTTATAAATTTTATTGTTTATTAGTAGTTTCCCAACTTTAAGACTTATCTAATTTAACTGAGAAAGAAAGCCCT
TTTCATATATATATATTTGGAATTTCTAAGGATGGTGGTTTGAGCCCTTGATGACTTTGATGTGCTAAGCCGAC
ACAGGCAGCTGTACATTGATGGCCATCAAAATGCAGCTTTGGTTAAATTTAATCAGGCCCTGTGCTGAGTTATG
GCACGACTTTTGTGTACCAAAATAAATAAAGGGTTTCTCTGTTGACATTTGTGTTGTTCTTTCTCTCT
TTATGTATTACATTTTAACCTATATTAATAAATGTTTAAATGATAATTTGCTTATGTCTTATAAACTCAGCAT
AAGAAAAAT

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FIGURE 1114

MAELGLNEHHQNEVINYMRFARSKRGLRLKTVDSQDLKESRLVEDTFTIDEVSEVLNGLQAVVHSEVESELIN
TAYTNVLLLRQLFAQAEKWYLKLTQDISELENRELLEQVAEFKAEITSSNKKPILDVTKPKLAPLNEGGAELL
NKEILRLQEENEKLSRLKTIEIQATNALDEKSKLEKALQDLQDQGNQKDFIKAQDLSNLENTVAALKSEFQKT
LNDKTENQKSLEENLATAKHDLLRVQEQQLHMAEKELEKKFQQTAAAYRNMKEILTCKNDQIKDLRKRLAQYEPED

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FIGURE 1115

AGATGACGTGCGGCTCGTGGGGCAGCTCGGCAGCATGGCGTCCGTGACGCTGAGCGAGGCGGAGAAGGTGTACAT
CGTGTCATGGCGTCCAGGAAGACCTCCGTGTGGATGGCCGTGGCTGTGAGGACTACCGATGTGTCGAAGTGGAAAC
TGATGTGGTGTCCAACACTAGTGGGTCGCGCAGGGTCAAGCTGGGTCAACAGACATCTTGGTGGGAGTGAAAGC
AGAAATGGGGACGCCGAAGCTGGAGAAACCAATGAAGGCTACTTGGAGTCTTTGTGTGACTGTTGAGCCAGTGTC
TACCCCTGAATTTGAAGGTAGAGGAGGTGATGACCTTGGCACCAGATCGCTAACACCCCTCTATCGGATATTTAA
CAATAAAAGCAGTGTGACCTTAAAGACCCCTGTGATTAGTCTCGGGAGCACTGCTGGGTTCTCTATGTGGATGT
GCTGCTTCTGGAATGTGGTGGAAATTTGTTTGATGCCATTCCATTGCTGTAAAGGCTGCTCTCTTCAATACAAG
GATACCAAGGGTTCGAGTTTGGAGGATGAAGAGGGGTGGAAGGACATTGAATTGTCAGATGACCCTTATGACTG
CATACGACTAAGTGTGGAGAATGTCCCTGCAATTGTCACTCTGTGCAAGATTGGCTATCGGCATGTGGTGGATGC
TACTCTTCAGGAGGAGGCCCTGCTCGCTGGCCAGCTTGCTGGTGTGCGTGACCAGCAAGGGAGTTGTGACGTGCAT
GAGGAAAGTGGGGAAGGGCAGCCTGGACCCAGAGAGCATCTTCGAGATGATGGAGACTGGCAAGCGTGGGGCAA
GGTACTGCATGCCCTCCTTGACAGTGTGTGCACAAGGAAGAAAGCCTGGGGCCCAAGAGACAGAAAAGTTGGATT
CCTGGGATGATTGACATCAACTGCTCAACTGTGGATTGTTTTTACTTTTAAACCGGTCGTATATA
TTTTTCTTCGCTGTTACGAATTTACAGCAGCATTGTACATGAAAATTAAGGCTATTTTCTGGTCTGGTT

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FIGURE 1116

MASVTLSEAEKVYIVHGVQEDLRVDGRGCEDYRCVEVETDVVSNTSGSARVKLGHTDILVGVKAEMGTPKLEKPN
EGYLEFFVDCSASATPEFEGRGDDLGTEIANTLYRIFNNKSSVDLKTLCISPREHCWVLYVDVLLLECGGNLFD
AISIAVKAALFNTRIPRVRVLEDEEGSKDIELSDDPYDCIRLSVENVPCIVTLCKIGYRHVVDATLQEEACSLAS
LLVSVTSKGVVTCMRKVGKGLDPESIFEMMETGKRVGKVLHASLQSVVHKEESLGPKRQKVGFLG

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FIGURE 1117

CACCGTGCCCAAGAGAAAGGCTGAAGGGGATGCTAAAGGAGATAAAGCCAAGGTGAAGGATGAACCACAGAGAAG
ATCCATGAGGTTTTCTGCTAAACCTGCTCCTCCAAAGCCAGAGCCCAAGCCTAAAAAGGCCCTGCAAGAAGGG
AGAGAAGATACCCAAAGGGAAAAAGGAAAAAGCTGATGCTGGCGAGGAGGGGAATAACCTGCAGAAAACGGAGA
TGCCAAAACAGACCAGGCACAGAAAGCTGAAGGTGCTGGAGGTGCCAAGTGAAGCATGTGCATTTTTATAACTG
TGTACTTTTGATGACTGTACAGCTTGAAATACTATTTTTATCAAGTTTTATAAAAAATGCAGAATTTTGTTTACT
TTTTTTTTTAAAGCTATGCTATTAGCACACAGAACACTTCAGTGTGTTTTAGGGAGAAAGGGCATATGTCACTA
ATAGAAATGTCCAAAAGCTGGATTGATGTGGGGAAAAACACCTTTCCTTCTAGCTTTGAGAGACTTCCTCTTGGC
TCCCAGGAGGAGGGATTCCCTGACTTTGACACAGATGGTCACCTTGGCACAAAAGCCTTGTAGGATGGAAAAACA
AATTTGTTTTTATGTCTCTTCTCCCTTTCCATCCTTCAGCATAGACTTAACTCCCTTAAGCCACAGACATCTGTT
GGGACCTGACCCCAAGTCATTGGTTACCAAGTGTGTCAGGCAATCTGGACTTTCAGTGATGCCACTGAGATGGCA
CCTGTCAAAACAGCGGTGGTTCCATTTCTAGACTGTGGATCTTCAGATAAAATCTGCCATTTTCATTTCACTTCC
TGAAACTCAGGGTCGGCTTGTGAAAAGCTGTAAACAACATGCTAAATGTGAAATGTCAACCCCTCACTCTAAACT
TTCCCTGTTAGAGCATCAGACGAAAACCTTCATTGGGTTTTATAGTGGCTTTCAGATTTTGTAGTCAATTGAA
GAAGGGAGTTTTAAATTTGTTGTATCTGTTTCATGATTGTCTGCCCATGTCCTGCCTGAAATACCATGATTGTTT
ATGGAAGATATCTTTAATAAAGCTGGATACAGTTTGGC

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FIGURE 1118

VPKRKAEGDAKGDKAKVKDEFQRRSMRFSAKPAPPKPEPKPKKAPAKKGKIPKGGKKGADAGEEGNNPAENGDA
KTDQAQKAEGAGGAK

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FIGURE 1119

AAGCCTCTCGGTCTGTGGCAGCAGCGTTGGCCCGGCCCGGGAGCGGAGAGCGAGGGGAGCGGGAGACGGAGGAA
GGTCTGAGGAGCAGCTTCAGTCCCCCGGAGCCGCCACCGCAGGTCGAGGACGGCTCGACTCCCCGGCGGGGAGG
AGCCTGTTCCCTCGAGGGTATTGAAGTATACCATCAACTGTTTTGAAATCCAGCGTGGACAAATGGCTACTCA
AGCTGATTTGATGGAGTTGGACATGGCCATGGAACCAAGACAGAAAGCGGCTGTTAGTCACTGGCAGCAACAGTC
TTACCTGGACTCTGGAATCCATCTGGTGCCACTACCACAGCTCCTTCTCTGAGTGGTAAAGGCAATCCTGAGGA
AGAGGATGTGGATACCTCCCAAGTCTGTATGAGTGGGAACAGGGATTTTCTCAGTCCTTCACTCAAGAACAGT
AGCTGATATTGATGGACGATGCAATGACTCGAGCTCAGAGGGTACGAGCTGCTATGTTCCCTGAGACATTAGA
TGAGGGCATGCAGATCCCATCTACACAGTTTGATGCTGCTCATCCCACATAATGTCACGCGTTTGGCTGAACCATC
ACAGATGCTGAAACATGCAAGTTGTAACCTTGATTAACATCAAGATGATGCAGAACTTGCCACACGCTGCAATCCC
TGAACTGACAAAACCTGCTAAATGACGAGGACAGGTGGTGGTTAATAAGGCTGCAAGTTATGGTCCATCAGCTTTC
TAAAAAGGAAGCTTCCAGACACGCTATCATGCGTTCTCCTCAGATGGTGTCTGCTATTGTACGTACCATGCAGAA
TACAAATGATGTAGAAACAGCTCGTTGTACCGCTGGGACCTTGCATAACCTTCCCATCATCTGAGGGCTTACT
GGCCATCTTTAAGTCTGGAGGCATTCTGCCCTGGTGAATAAGTCTTGGTTACCCAGTGGATTCTGTGTGTTTTA
TGCCATTACAACCTCCCAACCTTTTATTACATCAAGAAGGAGCTAAAATGGCAGTGCCTTTAGCTGGTGGGCT
CGAGAAAATGGTTGGCTTGTCTCAACAAAACAAATGTTAAATCTTGGCTATTACGACAGCTGCCTTCAAAATTTT
AGCTTATGGAACCAAGAAAGCTCATCATAGCTGAGTGGTGGGACCCCAAGCTTAGTAAATATAATGAG
GACCTATACTTACGAAAACCTACTGTGGACCAACAGCAGAGTGTGAAGGTGCTATCTGTCTGCTCTAGTAATAA
CGCGGCTATTGTAGAAGCTGGTGAATGCAAGCTTTAGGACTTCACCTGCAGATCCAAAGCTTCTGTGTTCA
GAACTGCTCTTGGACTCTCAGGAATCTTTAGATGCTGCAACTAAACAGGAAGGATGGAAGGCTCTCCTTGGGAC
TCTTGTTCAGCTTCTGGGTTAGATGATATAAATGTGGTCACTGTGCAGCTGGAATCTTCTTAACCTCACTTG
CAATAAATATAAGAACAGATGATGGTCTGCCAAGTGGTGGTATAGAGGCTCTGCTGCGTACTGTCTCTCGGGC
TGGTGACAGGGAAGACATCACTGAGCTGCCATCTGTGCTCTTCGTGCTATGACAGCCGACACCAAGAACGAGA
GATGGCCCAAGATGCAAGTTGCGCTTCACTATGGACTACCAAGTTGTTGGTTAAGCTCTTACACCCACCATCCCAGT
GCCTCTGATAAAGGCTACTGTTGGATTGATTGAAATCTTGCCCTTTGTCGCCGAAATCATGCACCTTTGGGTGA
GCAGGGTGCCATTCCACGACTAGTTAGTTGCTTGTTCGTGCACATCAGGATACCCAGCGCCGTACGCTCAATGGG
TGGGACACAGCAGCAATTTGGGAGGGGGTCCGCATGGAAGAAATAGTTGAAGGTTGATCCGGAGCCCTTCAAT
CCTAGCTCGGGATGTTTCAACCCGAATTTGTTATCAGAGGACTAAATACCATTCATTTGTTGTGCACTGCTTTA
TTCTCCCATTTGAAACATCCAAAGAGTAGCTGCAGGGGTCCTCTGTGAACTTGCTCAGGACAAAGGAGCTGCAGA
AGCTATTGAAGCTGAGGGAGCCACAGCTCCTCTGACAGAGTTACTTCACTCTAGGAATGAAGGTGGGCGACATA
TGCAGCTGCTGTTTTGTTCCGAATGCTCGAGGACAGGCCACAAGATTACAAGAAACGGCTTTCAGTTGAGCTGAC
CAGCTCTCTCTTCAGAACAGAGCCCAATGGCTTGAATGAGACTGCTGATCTGAGTCTGGTGGATATGGCCAGGATGCCT
AGAACCCCTTGGATATCGCCAGGATGACTTACCTATGCTTCTTTTCACTCTGGTGGATATGGCCAGGATGCCT
GGGTATGGACCCCATGATGGAACATGAGATGGGTGGCCACCACCTGGTGCTGACTATCCAGTTGATGGGCTGCC
AGATCTGGGCGATGCCAGGACCTCATGGATGGGCTGCTCAGGTCAGTACGCTCAGCTGGGCTGGTTGATGAG
TGACCTGTAATCATCCTTTAGCTGTATTGCTGAACTTGATTTGATTTGGCTGTAGAGTTGCTGAGAGGGCT
CGAGGGGTGGGCTGGTATCTCAGAAAGTGCTGACACACTAACCAAGCTGAGTTTCCATTTGGGAACAATGGAAT
AAACTTTTTGTTCTGCTGCTTTTTGGGTCGAGGAGTAACAATAACAATGGATTTTTGGGAGTGACTCAAGAAGTGAA
GAATGCAAGAAGATGATCACAAGATGGAATTTATCAAAACCTAGCCTTGCTTGTGTAATTTTTTTTTTTTTTT
TTTTAAGAAATCTGTGAATGGTAACTTGGCTTGGCTTGAAGTAGCTCTTTTTTTTTTTTTTTTTTTTTTTT
CAGTAACCTGTTTTTAAGTCTCTGCTAGTGTTAAGTTATAGTGAATCTGCTACAGCAATTTCTAATTTTTTAAGA
ATTGAGTAATGGTGTAGAACACTAATTCATAATCACTCTAATTAATGTAATCTGAATAAGGTGTAACAATGTG
TAGCCTTTTTGTATAAAATAGACAAATAGAAAATGGTCCAAATAGTTTCTTTTTAATGTCTAAAAATAGCAG
GTGGATCTATTTCATGTTTTGATCAAAACCTATTGGGATATGATGGGTAGGGTAAATCAGTAAGAGGTGTTA
TTTTGAAACCTTGTTTTGACAGTTTTACCAAGTTGCCTTTTATCCCAAAGTTGTTGTAACCTGCTGTGATACGATG
TTCAAGAGAAAATGCGGTTATAAAAAATGGTTCAGAATTAACCTTTTAATTCATT

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FIGURE 1120

GGGACTGCGAGCCAGGGACTCGGGCCGCGGGCGGGAAGAAGTGGGGCAGCGCTTGGCCAGGCCGAAAGGACTTT
GGGGGTGGGGGCTGGGAGTCCGTGTCTCGAATGAGGGAGGAGAGTGGAGTTGCCGGGGCTCAGGCCCGGCTCG
AGCATGGCGGATGAGAGGAGTCTGGGAGCCGAGGCTTAGGGTCCTTCGGGTGAGGGGAGACGGAGCCAGCGAGGA
GATGGAGCAGAAGCTTGTGGAGGAGATTCTTCAAGCAATCACTATGTCAACAGACACAGGTGTTCCCTTCCTTC
ATATGAGGAAGATCAGGGATCAAACTCATTGAAAAAGCTAAAGAGGCACCATTGTCACCCGTTGGAATAGCGGG
TTTTGCAGCAATTGTGCATATGGATTATATAAACTGAAGAGCAGGGGAAATACTAAAATGTCCATTTCATCTGAT
CCACATGCGTGTGGCAGCCCAAGGCTTTGTTGTAGGAGCAATGACTGTTGGTATGGGCTATTCATGTATCGGGA
ATTCCTGGGCCITTAGTTAGATGTCTTATTATTAAAGTTACCTATTATTGTTGAAATAAACTAATTTGTATGGGT
TTAGATGGTAACATGGCATTTTGAATATTGGCTTCCTTTCCTTGACGGCTTGATTGCTTGGTGACCGAATTACTA
GTGACTAGTTTACTAAGTAGGTCAATCAAGGAAGTCAAGTTAACTTAAACATGTCACCTAAATGCACTTGTATGGT
GTTGAAATGTCCACCTTCTTAAATTTTAAAGATGAACCTTAGTTCTAAAGAAGATAACAGGCCAATCTCTGAAGGTA
CTCCCTGTTTGTGTCAGAAATGTGAGAT

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FIGURE 1121

TGGTGTGACGACCACTTACCCACAGGAGCCACATCCAACCTCGGCTCTCAGCTGAGGAAGCAGCCCATCGCCTT
GCACGCCTGGACACTAACTCACCTAGCATCTTCCAGCACCTGGACGAACTCAAGGCATTCTTCGAGAGGTTGTG
AGTGATGGTGTACCCCTGGTGTAGCCCTGGTCCCCACCGGCAGCCCCACTCCTTCATACCCAGGGTTCCCCA
GACCTGTTGGTGACTGTGAGTGCCAGTGGGCTGCTGGGCACCCACAGCTGGTTGCCCTATGACCGCAACATAAGC
AACTACTTCAGCTTCAGCAAAGACCCACCATGGGCAGCCACAAGACGCAGCGACTGCTGAGTGGCCCGTGGGTG
CCAGGCAGTGGTGTGAGTGGACAAGCACTGGCAGTGGCCCCGATGGAAAGCTGCTATTACGCGGTGGCCACTGG
GATGGCAGCCTGCGGGTGACTGCACTACCCGCTGGCAAGCTGTTGAGCCAGCTCAGCTGCCACCTTGATGTAGTA
ACCTGCCTTGCACTGGACACCTGTGGCATCTACCTCATCTCAGGCTCCCGGACACACGTCATGGTGTGGCGG
CTCCTGCATCAGGTGTGCTCGTGGGCAGCTCTGTGGGGCCCCCTAGCCACAGACCTGCAGCCCATCGTCCCTC
AGTGGCCTTCCAGTCTCTGCTCCTCTAGTC

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FIGURE 1122A

AGTTGACGCGCGCGGGAAGATGGTGGAGGACGCGCGGAGGAGCTGGAGGATCTGGTGCACTTCTCCGTGTCTG
AGTTGCCCTAGTCTCGGGCTACGGCGTCATGGAGGAGATCCGCGCGGAGGGAAGCTGTGGCAGCTGACCCCTCAAGA
TTGGGGGACCACAAATTCAGTGCCGCCACCGGATTGCTTTAGCAGCCTCGATCCCGTATTTCCATGCTATGTTTACAA
ATGACATGATGGAGTGAAGCAGGATGAGATTGTAATGCAAGGAATGGACCAAGTGCCCTGGAGGCTCTGATCA
ACTTTGGCTACACCGGCAACCTTGCCATTGACACGCAAAATGTCCAGTCATTGCTGATGGGGGCGAGCTTCTCTG
AGCTCGACGAGCATCAAGACGCGCTGCTGCACATTCCTTCGAGAACGGCTTACCCCAAGGCTGCTGAGCTG
GCCAGTTTGCTGAGACAAATGATGTGTGCTGTGCTGTACGACGCTGCCAACAGCTTTCATCCACCAGCACTTTGTGG
AGGTGTCCATGTGAGAAAGATTCTTGCCCTTGCCCTTGAAGACGCTGTGAGCTGGGTGAGATACGACGGGAGCAGGGGTCCCT
ATGTCAAATCTGAGGAGCAGGCTTTTGAAGCTGCAATTGGCCCTGGGTGAGATACGACGGGAGCAGGGGTCCCT
ACCTGCTGAGCTGCTGTCCAATATCCGCTTGCCCTCTGTGCGGCCCACTTCCCTTCAGACAGAGTACAGCAGG
ATGACCTGGTGCGTTGTGTCACAAATGCAAGGACCTGGTAGACGAAGCAAGGACTACCACTCATGCCAGAGC
GCCGGCCCCACCTGCCAGCTTTCAGAACCGGCCACGCTGTGACATCCATCGCTGGACTTATCTACGCTGTAG
GGGGCTCAACTCAGCAGGCTATTCCTGAATGGTGGGAAGTGTTCGACCCCAATTGCCAATTGCTGGGAGAGAT
GCCCTCCCATGACAAAGCCGCGAGCCGCTTGCCCTGGCTGTGGTGAACGGGCTTCTATATGCCATCGGAGGAT
ATGACGGCCAGCTACGCTGAGCAGCTGTGGAGCCCTACAACCCGAGACAGACATGGACAGAGTGGGGAGCA
TGAATAGCAAGAGAAGTGGCTATGGGACAGCTGTGCTGGATGGGAGATCTGCTGTGGGGGCTACAGTGGCA
ACTTTCCTCCAGCTCCGTGGGAGCACTACTACCTGAGACGGAACAATGGACAGTGGTACCTCGATGAGCTGCA
ATCGCAGTGTGCTGGGGTTACAGTCTTTAGGGGAGGATATATGTGTCAGGCGGCGCATGATGTTTGCAGATCT
TCAGAGCTGTGGAACTACACACCAACACAGCCACTGGCAGCTGCGAGCTGCGATGCTCAACAAGCGCTGCC
GGCAGGAGCCGCTCCCTGGGAGCAAGATGTTGTCTGCGGGGGCTACAGTGGCTTGCTGCTTCCCTACGATTG
CCGAGATGTACAGCTCTGTGGCAGCAGTGGTGTGCTGATTGTCCCATGACAGCGCAGGAGCCGGGCTTCCCT
TGGTGGCCAGCTGTGGGCGCTTACGCTGTGGGGGCTACGACGGAAGTCAAACTTAAGCTCAGTGAGATGT
ATGACCCAGACAGACTGCTGGACATTATGGCCCCATGGCGTGCCATGAGGGAGGGGTCCGTGTGGGCTGCA
TCCCTCTCTCACCATCTAAGGAGAGGATGGGATGTGGTGGGGCAGGATCTTGATACAGACATAGGCGCTTCT
TCCAGGAACAGTCCCTCAGGAGGCGAGTGGACCAAGAGATGGCGAAACGTAAGCTCGCCGAGGTTACAGTTT
TTCAGGTGCTTAAGCGCTCCCCCACTGTGCCACCTTGTGACCTTCAAGCTTGGGTCACTAAGATGACAGCAT
GGAAACAAGCTCCTCTGATCTCTGAGCTGGTGACATGGAATGTTTCTGTGTCACATGAACAAGGCTCCAT
CCAGGCCAGCTCTCTACCCACGCGCTCTCTGTGGGCGAGCTGTTACAGAGAGGCTTCCATCTGATGCTCCCCAT
CGCGTGCTTGTCTTCCAGCGAGTCTGGCCAATTTGCCATGGGAGGCTGCACTGTCTCAAGCGCTGTGGAACTG
GGATGTAGCTGGGGACGAAGGACAGACCAGCGTTCCTCTGCTGAGATGGGTGTGGCCACAGCAGTGAAGG
CTGCACACAGGCAACATCTCTTCCACAGTGGGCGACCAAGGATTCGTCTCCATTGCTGGGTAGCAGGAGGA
AGAGAAGTTTTCCTCATGTCTAATTTGGGATTTCAGTGAAGCGCTTTTGATCTGTCCAGGAGAACAGAGGGGAA
AAAAGATACTTTGAAGAACTGAGGAAATTTAAACAAGAAACACTTGAAGAAACTGGAAAGAAAAATAATT
TTTTATGTGAACAAATTTGCAAGAGAAAAAGCATATAAGACACTAACGGCAAACTATGTTTAAATGGAAAA
TCGCTCTAACTGGAGAAGGCGGATCCACCCACATTGCGATCCAGGGTCCGTGAGGCTCGCATGTAGCTGGGG
GTTCCCTCTGAGCCCCAGTGTGTGGGAATCAGTGCACTTTGACTGGGCTCTAGTAAGGTGCTCATGGGGTTT
GTCTCTACCCCACTCAGAGGACTTTTAAATCATAGGCTAGAGGATAGGCTATCTGCTGAATTACTGCCA
CTCTTCTGTGGGGGCTCTAGCTGTGGCTGGGGGCTCAGGCGCCCTGTGATTACCTCTACTGCCCACCAT
GCGCTCATTCAGATCCCCCACTCACTAATCTGCTTCTTTTTCAGCAGAGGAAACAGCAGAGCTTCCATAT
ATTTCTACTTGGCCATCAATCTCGTTCTTGGATGATTTCCTCATTTGTGATGCTCTGCGGCGAGCTTGACCAT
GCACCTCTAGAACCTAACCAAGGCTTCTTCTACAGCTGTGGGCGGGCTGTGCTGCGTAACCTTGTGCTCTG
CCATTCCACTGCTCTCCATCCACTGCCAATCCGAAGAGTCTGGCCCTCCCTCGGAGCTGGGAGACTGACCAG
CAAGGTGGACCTTTACATTCAGCAGCACTGGCTTTTATGACATAAAGAACTAAAGGCGGAAGAATCTCTGTCT
GCTGCAAAAGAACAGATTTATATTTCTTCTCTAATCTTGGCAATGACCTTTACCTTTTGGAAAGATTCATAT
TGCTTCTCTCTCTGTGATGAGACCTAATGTAGCAGACGCGGACTCAAAGAGGAGGACATTTCTCTGCGAGT
CACTGGGAGCTGGGGCTGTCTTCAACTGTCTGCCCCAAATGGTTTCTTAAATCTTCCGATGAGACTAA
AGAAGATTCAATTCCTGTGAACCAAGCACTGAGCTTTAGGGCTCCAGTCTCCAGCTGCTGGTTCCTATCTCTTG
CTGCTGCTGGGGTGGCTGGAAGCTGTTCAGAAAGGCACAAATGTGGAGCTGGGGGTGCTCCCCACCCCGAG

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FIGURE 1122B

GACCGTCAGGTTTACCAGTGTGTGCAATCGCCATGTATTTCAGAGGGAAGTACCTTTGTTACCTACAACCTTAGGAG
CTAGGCCCTCTGCTACAAGCACTTGAAAATGATATTTTTATTTTAAACGTCTCAACAACTCGATATCGGATGTCGT
TTAACTGGGCTCGTGGTAGGGCTCCAGCATTTCTCCCTCCTTCTGGTTTGCTGTAGGGGTAGACTCGGAAGG
TGGGTGGGGTGTGCATTTCCCTGTTAGGAGTGTATCAGTGCTTGCTTATTATAAGCCCTTTCTTTTGTGAATTT
GAAGTAGCACCACAAGCCTGGATTGTGAAGTATTAAGAATCGGCTCTGTGGGCTACTGAGTGGGTCCTTAGGAT
ACTGGCCAGATTTTGCCACTGGGTATGGCAGATCATTTTCTACCATGGCCTGTGCTCTTGTAGTGGACTTCCT
GAGTCCAATCCCACCTCCTGGGTAGAAATTTACACTGCTGCACCTGAGGTCGATGTTTCAAAGTAAGATCAAGCC
AGTGTTTTGATCTGGGCTCTGAGCACAAGTCAGGAAACACCAACATATTACACTCTCCAGTAGGTTCCCTCAGT
CCGATGGTGAATGGCTATTCTGTAATGGCTGGTCTGGCTCTTTGGTGTGGAGCCTTCCAATAGCCCCATGAAA
AGAAGCATCACCCAAGGATATTGTAAAAAGGATGTAACAAGGAGATAGGGTAGACATTGTACTCAGTGGGCCTTG
GGCCCTAGCCCAGCTCTGAGCAGAGGACTGTGGCATTCACTGTCCTTGAGTGTTCACCTTCTTGGATAACACAC
GGGCCTTCTCTTCTGGATTTTCATCAGAGATTACAGCCAGATGGGGGCTGAAGACCATCCTCTTGACCACAGAGGT
GTGACTGTGGGAATTCCTCCCAATTTATGGTTTCCAGAAAATCTTAGTTCCTTTTATTATAGAATGCATGTCT
TTTGTTAAGAAACCAAGAGAAATAAAGAGAACACTCCTAAT

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FIGURE 1123A

AGAGAGGGAGGGGCCACGCGACCCGGACTGCGGGCCGAGAGCGCGCAGCGCGCGCTCCGCCCTGCTGCCGCCCC
GTCCGCCGCCGCCGCCGCCCGCAGCTTGGGAGGTGCTGCCACCACAGGTACCTGCACATGTTGTTCTTTGTGTCAG
TGCTCTCAAGTGTGTGGCCAGGGTGTCCATGGTCACTTTCCGGGATGGCAGCAAGGTGACTTCGGGTGAGGATGA
CCCTGACTGAAGAGGCTGCGTGAGAAGATATCTCGGGCTTCTACAACCATGGGGCTCCTCTGTGCATCCTATCCCA
TCCCATCATCTCCTTTACAGGGTTCTGCATCTTAGCCTGCTGCTACCCACTGCTGAAACTCCCCTTGCCAGGAA
CAGGACCTGTGGAAATTCACACCCCTGTGAAGGATTACTGCCGCCACCTGTGGACTCTGACCGCAACAAGGAG
AGCCTACTGAGCAGCCTGAGTGGTATGTGGGTGCCCGGTGGCTTATGTCCAGCAGATATTTGTGAAGTCTCTAG
TGTTTCCCTGGCACAAGAACCTCCTGGCAGTAGATGTATTTCGTTACCTTTGTCCCGGGCATTCCAACCTGGTGG
AGGAGATCCGGAAACACGTGCTGAGAGCAGCTCTGGGATCAGGAGCTTGGAGGAGTGTGTCTGCAAGTGACCG
ACCTGCTGCCAGGCCTTAGGAAGCTCAGGAACCTACTCCTGAGCATGGATGCCTGCTGCTGTCCCTGGGAACT
TCTGGCAGAAATGACTGGGAACGCTTCCATGCTGATCCTGACATCATTTGGGACCATTCCACAGCAGGACCTAAAA
CCCTGCAGACTTCAGCCACACTCAAAGACTTGTATTGGTGTCTCGGGAAGTACAGCGGGGTGAGCCTCTACA
CCAGGAAGAGGATGGTCTCCTACACCATCACCTGGTCTTCAGCACTACCATGCCAAGTTCCTTGGGACGCTGC
GTGCCCGCTGATGCTTCTGCACCCAGCCCCAAGTGCAGCCTTCGGGCGGAGAGCCTGGTCCACGCTGCATCTCA
AGGAGGAGATTTGGTGTGCTGTGAGCTCATCCCCCTTGTGACCACCTACATCATCTTGTGTTGCCTACATCTACTTCT
CCACCGGGAAAGTACTGACATGTGTCAAGTGGGGGCTGGCCCTGGCTGGCGGTGACGAGTGTGCTGCTGCG
TGCTCATGTCTGTGGGACTCTGCACACTCTTCGCGCTGACGCCACCCTCAATGGCGGGGAGATTTTCCCTACC
TTGTGGTGGTTATTGGGTTAGAGAAATGTGTTGGTGCTACCAAGTCTGTGGTCTCAACCCCGGTAGACCTGGAG
TGAAGCTGCGGATCGCCCAAGGCTTAAGCAGCAGAGCTGGTCCATCATGAAGAACATGGCCACGAGGCTGGCA
TCATCCTCATCGGCTACTTCAACCTAGTGCCCGCCATCCAGGAGTCTGTCTCTTGTCTGTGCTGGGGCTGGTGT
CTGACTTCTTCTCTAGATGCTGTTTTTACCACTGTCTCTGTCTTATTGAGTACCTGCGGATGGAGCTAGCAGAC
TGAACAAGCGACTGCCCCCTGAGGCTGCTGCGCTCAGCCAAGCCAGTGGGACAGCCAACGCGCTACGAGCGGC
AGCTGGCTGTGAGGCGCTCCACACCCACCATCAGCTTGACGCGCTCTTCCTTCGGAACCTGCGGCTCCCCA
AGAGGCTGCGTGTGTTCTACTTCTGSCCCGACCCGCGCTGGCACAGCGCTCATCATGGCTGGCAACCGTTGTCT
GGATTGGCATCCTGGTATACAGAGACCAGCAGGGCTGCGCAACTACCTCGCTGCCAAGGTGACGGAAACAGGCC
CATTGGGTGAGGGAGCCCTGGCTCCCATGCCCTGCCCTAGTGGCATGCTGGCATGCTGGCCCCAGCCCGGACCTGCT
TCTCCATCTTCCCACTGATGCCCTTAAGCTACCTGAGAACCAGACGTGCGCAGGCGAGTCACTGAGCGTGGAG
GTCCAGCAGAGGTTGTCCATGACAGCCAGTCCAGAGGTAACCTGGGGGCTGAGGATGAGGAACTTTGGAGGA
AATTGTCTTCCGCACTGGCCGACGCTCTTCACTATTACAACATCACATGGCCAAAGAGGTACATCAGCCTGC
TGCCCGTCACTCCAGTCAGGCTCCGCTGAAACCCGAGGGAGGCTCTGGAGGGCCGGCACTCAGGACGGCCGCA
GTGCTTGGCCCCCACCGGGGCCATCTGCTGGGCACTGGGAAGCAGGACCAAGGGCCAGGTGGGGTGCAGG
CCCATGAGACGCTCACCTCTTACAAGGTGGCGGCGTGCGCTGGCCACCGGCATCTGTTGGTGTGCTGCTGCTG
TCTGCTCTACCGCGTGCTATGCGCCGCGCACTACGGGCACTGGGTGTGGGCGCGGGCGGAGGCGCGGGG
AGCTGCCCTGCGACGACTACGGCTATGCGCCACCCGAGCGGAGATCGTGGCGCTTGTGCTGGCGGGCACTCA
TGGACATCGAGTGCTGSCCAGCGACGGCATGCTGCTGTGAGTGTGCTGCTGGCAGGCACTGCTGCTGTGGG
ACCGCGAGACCGGGGATTGCTTAACGCGCATTCGCGCCAGGGCAGCGCCGGGACAGTGGCTGGGACGCGGG
TTGAGGCTCAGGAGAGCTGGGAACGACTTTCAGATGGTGGGAGGCTGGTCCAGAGAGCTTGGAGCAGGCTC
CCCTGAGACACCGCCCCGGGGGCTCTCGCGCGCTTCCCTCTTCGGGGACAGCCTGACCTCACTGCTTAATGT
ACACCAACTTTCAGGCGAGCTCGGTCTTCAAGCCACTCAGCGCCACTCAGCGCCGCGGACCGGGGCTGTGGCC
GCTCTCGGGACTCCCCAGGCTATGACTTCAGCTGCTGCTGGTGCAGCGGCTGTACAGGAGGAGGGGCTGGCGGCCG
TCTGCACACAGCCCTTGGCCCACTCCTCGCTGGCGGCTGCTGCTCCAGGCGCTTGGAGACGAGGGTGGCTCCC
CCGAGAAAGGCTCCCCCTTCTCGCTGGGCCCCAGTGGCGAGGGTTCCATCTGGAGCTTGGAGCTCAGGGCA
ACCTCATCGTGTGGGGCGAGCAGCGGCCGGCTGGAGGTGTGGGACGCGATTGAAGGGGTGCTGTGCTGCAGCA
CGCAGGAGGCTCCTCAGGCAATACCGCTTGGTGTGTTCTTGACAAAGGATTGTGGCTGCAGGCTCAACGGTT
CCCTTGATTCTTCTCCTTGGAGAGCCACACTGCTGCTCAGCCCCCTGCAGTTTAGAGGGACCCAGGGCGGGGCA
GTCCCCCTGCTCTCCAGTGTACAGCAGCAGCAGACAGTGGCTGTACCTTGACCCACACAGTGCCTGTGCAC
ACCAAAACCCATCAGACGCTCGTGAAGCCGCTGCTGGCGCTTGGTACTGGGAGCCACAGCAACACATGAGAG
TGTTCCGTCTGGAGGACTGCTGTGCTCTTCACTTCAAGGCCACTCAGGGGCCATCAGACCGGTGACATTG

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FIGURE 1123B

ACCAGACCATGGTGCTGGCCAGTGGAGGACAAAGATGGGGCCATCTGCCTGTGGGATGTACTGACTGGCAGCCGGG
TCAGCCATGTGTTTGCTCACCGTGGGGATGTCACCTCCCTTACCTGTACCACCTCCTGTGTCATCAGCAGTGGCC
TGGATGACCTCATCAGCATCTGGGACCGCAGCACAGGCATCAAGTTCTACTCCATTAGCAGGACCTGGGCTGTG
GTGCAAGCTTGGGTGTCATCTCAGACAACCTGCTGGTGACTGGCGGCCAGGGCTGTGTCTCCTTTTGGGACCTAA
ACTACGGGGACCTGTTACAGACAGTCTACCTGGGGAAGAACAGTGAGGCCAGCCTGCCGCCAGATCCTGGTG
TGGACAACGCTGCCATTGTCTGCAACTTTGGCAGTGAGCTCAGCCTGGTGTATGTGCCCTCTGTCTGGAGAAGC
TGGACTGAGCGCAGGGCCTCCTTGCCAGGCAGGAGGCTGGGGTGCTGTGTGGGGGCCAATGCACCTGAACCTGGA
CTTGGGGGAAAGAGCCGAGTATCTCCAGCCGCTGCCTCCTGACTGTAATAATATTAACITTTTTAAAAAACCA
TATCATCATCTGTGAGGCACTTTGGGA

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FIGURE 1124

MTLTERLREKISRAFYNHGLLCASYPIPIIILFTGFCILACCYPLLKLPLPGTGPFVEFTTPVKDYSPPPVDSDRKQ
GEPTQEPWEYVGAPVAYVQQIFVKSSVFPWHKNLLAVDVFRSPLSRAFLVEEIRNHVLRDSSGIRSLLEELCLQV
TDLLPGLRKLRLNLLPEHGCLLLSPGNFWQNDWERFHADPDIIIGTIHQHEPKTLQTSATLKDLLFGVPGKYSVSL
YTRKRMVSYTITLVFQHYHAKFLGSLRRLMLLHSPNCSLRAESLVHVHFKEEIGVAELIPLVTYIILFAYIY
FSTRKIDMVKSKWGLALAAVVTVLSSLLMSVGLCTLFGLTPTLNGOEIFFYLVVVIGLENVLVTKSVVSTPVDL
EVKLRIAQGLSSSESWSIMKNMATELGIIIGYFTLVPAIQEFCFVAVGLVSDFFLQMLFFTIVLSIDIRMELA
DLNKRLLPPEACLSAKPVGQPTRYERQLAVRPSIPHTITLQPSFNRNLRLPKRLRVVYFLARTLAQRLIMAGTV
VWIGILVYTDPAGLRNYLAAQVTEQSPLEGALAPMPVPSGMLPPSHPDPAFSIFFPDAPKLPEMQTSPGESPER
GGPAEVVHDSFVPEVTWGPDEELWRKLSFRHWPTLFSYYNITLAKRYISLLEVIPVILRLNPREALEGRHPQDG
RSAWPPPGPIPAGHWEAGPKPGGVQAHGDVTLYKVAALGLATGIVLVLLLLCLYRVLCPRNYGQLGGGGRRRR
GELPCDDYGYAPPETEIVPLVLRGHLMDIECLASDGMLLVSCCLAGHVCVWDAQTDCLTRIPRPGQRRDSGVGS
GLEAQESWERLSDGGKAGPEEPGDSPLRHRPRGPPPSLFGDQDPLTCLIDTNFSAQPRSSQPTQPEPRHRAVC
GRSRDSPGYDFSCLVQRVYQEEGLAAVCTPALRPPSPGPVLSQAPDEEGGSEKGSPLAWAPSAEGSIWSLELQ
GNLIVVGRSSGRLEVWDAIEGVLLCSSEEVSSGITLVFLDKRIVAARLNGSLDFFSLEHTALSPLQFRGTGPR
GSSPASPVYSSSDTVACHLTHTVPCA HQKPIITALKAAAGRLVTGSQDHTLRVFRLEDSCLFTLQGHSGAITTVY
IDQTMVLASGGQDGAICLWDVLTGSRVSHVFAHRGDVTSLTCTTSCVSISSGLDDLISIWRDSTGIKFYSIQDGLG
CGASLGVISDNLLVTGGQCVSFWDLNYGDLQTVYVLGKNSEAQPARQILVLDNAIVCNFGSELSLVYVPSVLE
KLD

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FIGURE 1125

GTTCTCTTCGCCCGGTCCCTGCCGCGCAGAGCCCTCGGGGTCGGCGGGAGCAGCAGTGGCGGCGCTAGGAGACTC
ATGGCGCTGGCGCGCGGCATCTCTCCGCGCCTGCAGCCGCTGGGTCCCGCGCTGCTGGGCGCAGGGTTCGCTCG
CGCGGCTTCTCTCAAGCTGCGCCACCCCGACCACCAAGGAAGCCGCGAGGCCGAGTCAGGGATGGCCCC
GGCGGGCCTGGGGAAGGCGACGGAAGCTTGGTGAACGCTTCTAGGGACCTATTAATAAGAGTCCACAGCCAAA
AATCTTCTCAACAGTGATTGGAAGAGCCCTCGGCATCTCACATGCAAAAGACAACTAGTCTACGTGCACACA
AATGGACCGAAGAAAAAGAAAGTCACTGCACATAAAATGGCCCAAGAGCGTGGAGGTAGAAGGCTATGGCAGC
AAGAAGATCGATGCTGAGCGGCAGGCTGCAGCTGCAGCCTGCCAGCTGTTCAAGGGTTGGGGTCTGCTAGGTCCC
CGGAATGAGTTGTTGACGACGCCAAATACCGAGTGCTAGCTGATCGCTTGGCTCCCTGCCGACAGCTGGTGG
CGTCCGGAACCCACCATGCCCCCTACTTCTTGGCGGCGAGCTGAATCCAGAGATATTGACACAGGGGAGCTGGG
GGCCTATCCCGCTCTTTAGGCGCGGAAGAGAGGAGCAGGAGGAAAGAGCTAGAAGAGGGACCATAGATGTT
ACCGACTTCTTGTCATGACCCAGCAGGATTCCACGCTCCACTCAGGGACTCAAGGGGGAGTTCCTTTGAGATG
ACAGATGACGACAGTGCCATTAGGGCTCTGACCCAGTTTCCACTTCCCAAGAACCTTCTGCGCAAGGTGATTGAG
ATTGCAACGTCTCTCCACAGCTAAGAACCCTCATGCAGTTCATCTACTGTGGGCGACCAAGACCAAGCTGTCTACA
CTCACCCCTGCTCTGGCCCTGCCCATGACCTTTGTTGCCAAGGGCGCGCAAGCAGAGGCTGAGAAATAAGGCG
GCAGCCTTGGCTGCAAGAACTGAAGAGCTGGGCCCTGGTGGACAGGAACAACGCAACCGCTTACACACGGTTAC
GGAGCCGATGGCTGACGTATTTTCATGGCAGTCAAGTCCAATGGCAGCGTCTTCGTCCGGGACTCCTCTCAGGTGC
ACCCGCTAGCTGTGCTGCTGCTGACCGACGGGGACGTGCACATCCGTGATGACGGGCGCGGGCCACCATCTCAC
TGAGCGACAGTGACCTGCTGCGGCTGGAGGGTGACTCGCGTACCCTGCGGCTGCTGAAGGAGCTGCGCGGGGCC
TGGGCGCAGTGTGGAGCGGAGCCTGCGCAGCGAGCTGGCTGCACTTCCCCCAGCGTACAGGAGGAGCAGGGC
AGCTGCTTGCCTACTGGCAGAGTGTGCGAGGACCTGTGGCAGCTTTGATGTGCGCAAGACAGCTGACGACT
GAGCCCTGCTCTGCTGGGGCTGTGTACAGAGTGCAAAATGTTTATTTAAATAAAGTCTCTATTTATCCCTTG

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FIGURE 1126

MAAARRLMALAAGISPRQLGPRAGRQGRSRGFSSSCAHPDHTKEAAEASGMAPGGPGEGDGLVNASRDLL
KEFPQPKNLLNSVIGRALGISHAKDLVYVHTNGPKKKKVILHIKWPKSVEVEGYGSKKIDAERQAAAAACQLFK
GWGLLGP RNELFDAKYRVLADRF GSPADSWWRPEPTMPPTSWRQLNPESIRPGGPGGLSRSLGREEEDEEEEL
EEGTIDVTDFLSMTQQDSHAPLRDSRGSSFEMTDDDSAIRALTQFPLPKNLLAKVIQIATSSSTAKNLMQFHTVG
TKTKLSTLTLLWPCPMTFVAKGRRKAEAEENKAAALACKKLKSLGLVDRNNEPLTHGYGADG

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FIGURE 1127

CGAAAGCCGGCCTGGCTGCGACAGCCTGGGTAAGAGGTGTAGGTGCGGCTTGGTTTTCTGCTACCCGAGCTGGG
CAAGCGGGTGGGAGAACAGCGAAAGACAGCGTGAAGCTGGGCCGTTGCCTCGAGGCTCTCGCCCGGCTTCTCTTGC
CGACCCGCCACGTTTGTGTGGATTAAATCTTCAGGTTGCCGCGCCGCCCGCCGCGCTGCGCTCGCGGTGTGAGA
GGGAAGCACCCGTGCTCTGGCTGGTGGCTGGCGCTGGAGGGTCCGCACACCCCGCCGCCGCGCTTGGCC
GCGGCAGCCGCGTCCCTGAACCGCGGAGTCGTGTTTGTGTTTACC CGCGGGCGCCGGTGGCGCGCGCCGAGCG
CGGTGTCGGCGGGGCGGGCGGTCCGCGCGGAGGAGAGGAGAGCGGAGCTCTCGCAGGCGCGGCGCGG
CCATGGAATCTGGGCCGAGCCCGCACCGCGCGCTGCTCTTGCCTGCAGCCCCCTCCCGCTGCGAGC
CCGTCGTGAAGGCGCTATTGGCGCTTCAGCCGCGGGGGACTGTGCTGTCAACCACTGACCGTCACTATGG
ACCACTGTCAGGGTCTGGGCGAGTGATTATGAGCAACCACTGGAGGTGAAGAACACAGTAATCTGCAGAGAATGG
GCTCTCCGAGTCAACAGATTAGGTTTCTGTCTAGATTCTCTGGGCCATTGGACAGTAAAGAAAACCTTGAA
ATCCTATGAGAAGAATACATTCCTACCTCAGAAGCTGTGGGATGTAGTCCAGCTCTGAAGAGGAGCCATTCTG
ATTCTCTTGACCATGACATCTTTCAGCTCATCGACCCAGATGAGAACAAAGGAAAATGAAGCCTTTGAGTTAAGA
AGCCAGTAAGACCTGTATCTCGTGGCTGCCGCACTTCTCATGGACTCCAGGAGGGTAAAGATCTCTTCACACAGA
GGCAGAACTCTGCCCGAGCTCGGATGCTTTCTCAAATGAAGAGATAGCAGTGAACCAAGGAATTCATCTCTC
TTTTTACACCCAGTCACTGTGACAGCCACTTTGTCTGATGAGGATGATGGCTTCGTGGACCTTCTCGATGGAG
AGAATCTGAAGAATGAGGAGGAGACCCCTCGTGATGGCAAGCCTCTGGACAGCTCCTCTGCTATGAGAACTA
CAAACCTTGACAACCGATGCAAGCTGTTTGACTCCCTTCCCTGTGTAGCTCCAGCACTCGGTGAGTGTGAAGA
GACCAGAACGATCTCAAGAGGAGTCTCCACCTGGAAGTACAAGAGGAGGAAGCAATGCTGGCGGAGCGCCCA
AAGAGTCAACTAATCCAGAGAAGGCCCATGAGACTCTTCATCAGTCTTTATCCCTGGCATCTCCCCAAAGGAA
CCATTGAGAACATTTTGGACAATGACCCAAAGGACCTTATAGGAGACTTCTCCAAGGGTTATCTCTTCATACAG
TTGCTGGAAACATCAGGATTTAAATAACATCTCTCCAGAAATATGGCATCTGTTTGAATGGCAAGTTTGGCA
ACCTCATTAAAGAGTTTGTATCATCGACTGTCGATACCCATATGAATACGAGGAGGAGCCACATCAAGGGTGCAG
TGAACCTGACATGGAAAGAGGTTGAAGACTTCTTATTGAAGAAGCCCATGTACCTACTGATGGCAAGCGTG
TCATTGTTGTGTTTCACTGCGAGTTTTCTTCTGAGAGAGGTCGCCGATGTGCCGGTATGTGAGAGAGAGATC
GCCTGGGTAATGAATACCCCAAACCTCACTACCTGAGCTGTATGTCTGAAGGGGGGATACAAGAGATTCTTTA
TGAATGCCAGTCTTACTGTGAGCCCTAGCTACCGGCCATGCACACGAGGACTTTAAAGAAGACCTGAAGA
AGTTCCGCACCAAGAGCCGACCTGGGCAGGGGAGAAGAGCAAGAGGAGATGTACAGTCGTCTGAAGAAGCTCT
GAGGGCGGACGAGCAGCCAGCAGCAGCCAAAGCTTCCCTCCATCCCCCTTTACCTCTTTGCTGCAGAGAACT
TAAGCAAAGGGGACAGCTGTGTGACATTTGGAAGGGGGCCTGGGACTTCCATGCTTTAAACCTACCTCCACAC
TCCCAAGGTTGAGCCAGGGCATCTTGTGCTAGCGCTCTTGTGCTGCTGTAGAGCTCCTCGTCCATATCA
GAACGTGTGCCACAATGCAAGTCTGTGAGCACCCTGTCAAGCTGCTGTAGCCACAGTGGGATGAACAGCCGGGGC
TTATCGGGCTCAGCCATCTCATGAGGGGAGAGGAGACGAGGGGAGTAGAGAAGTTACACAGAAATGCTGCTGG
CCAAATAGCAAGA

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FIGURE 1128

GAATTCCGGCCATGAAGACCCAAAGGAATGGCCACTCCCTGGGGCGGTGGTCACTGGTGCTCCTGCTGCTGGGCC
TGGTGATGCCTCTGGCCATCATTGCCCAGGTCCTCAGCTACAAGGAAGCTGTCCTTCGTGCTATAGATGGCATCA
ACCAGCGTCTCTGGATGCTAACCTCTACCGCTCCTGGACCTGGACCCAGGCCACGATGGATGGGGACCCAG
ACACGCCAAAGCCTGTGAGCTTCACAGTGAAGGAGACAGTGTGCCCCAGGACGACACAGCAGTCACCAGAGGATT
GTGACTTCAAGAAGGACGGGCTGGTGAAGCGGTGTATGGGGACAGTGACCTCAACCAGGCCAGGGGCTCCTTTG
ACATCAGTTGTATAAGGATAACAAGAGATTTGCCCTGCTGGGTGATTTCTTCCGGAATCTAAAGAGAAGATTG
GCAAAAGAGTTAAAGAATTGTCCAGAGAATCAAGGATTTTTTGCGGAATCTGTACCCAGGACAGAGTCCTAGT
GTGTGCCCTACCCCTGGCTCAGGCTTCTGGGCTCTGAGAAATAAACTATGAGAGCAATTTCAAAAAAAAAAAAAA
AAAAAACCGGAATTCT

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FIGURE 1129

MKTQRNGHSLGRWSLVLLLLGLVMP LAIIAQVLSYKEAVLRAIDGINQRSSDANLYRLLDLDFRPTMDGDPDTPK
PVSFTVKETVCPRTTQQSPEDCDFKKDGLVKRCMGITVTLNQARGSFDISCDKDNKRFALLGDFFRKSKEKIGKEF
KRIVQRIKDFLRNLVPRTES

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FIGURE 1130

CGTGC GTGCGCGCGCAGATGTGGGCCCCGCGGGAGCAGCTACTGGGCTGGAGTGC GGAAGCTCTGCCTGCCAAGG
ATTCTGCCTGGCCCTGGGAAGAGAAGCCTAGATATCTGGTTCAGTGGCAGATGGGGCACTGGCCAGAGGGGTTA
GGAGGATTTGGACTCTCCTTGGGAGTCGCTGTGATACGGCCTTCAATTATAGTTGTCTTCCCTCTTGGATTTC
ACCACCTTCCCTGAAACCACGAGCTGGAAGCTGAGACCAGCTGGTCACTGCTGGGCCCTGCTAGGAGCCACACGGA
AGCTGCCACAGCCAGACACAGAGCCTCAAAGGCCGCCATCTTGAAAAACCAACCTTGACCTCCACAATGATTG
ATTTTCAAATGTTGAACAGCTTTTGCAGAACTATAATAAACCCAGGTGTGATACCCGTCTCAAGTATTGTGGTG
ATCAAATAGGACCAGTGACTTTTCAGGAGTGTGGCTGTGCTTTTCACTGAGGCAGAGTGGAAAGAGACTGAGCCTTG
AGCAGAGGAACCTATACAAAGAAGTGATGCTGGAAAATCTCAGGAATCTGCTCATTTGGAATCAAAGCCAGAAG
TCCATACCTGCCCTTCTTGCCCTCTGGCCTTTGGCAGTCAGCAGTTCCCTCAGCCAAGATGAGCTACACAATCATC
CTATTCCAGGTTTCCATGCAGGAATCAACTCCACCCAGGAAATCCCTGCCAGAGGATCAGCCACAGTCACAAC
ATCCTTCTGATAAAAATCAGAGGGGGCTGAAGCAGAAATCAACGAGTGGAAAGGAGCGTCAGACCCTTGTTTT
GGAGTACAAATGAAAGGGGGGCTTAGTGGGTTTCTCTAGCCCTGTTCCAGAGACCACCAATAAGCTCTTGGGGAG
GCAACAGAAATATTAGAGATACAGCTCAGTCCAGCCAGAAATGCAAGCTCTGAGGAAGTAGACAGAAATTTCCAAGA
GGGCAGAAACCCAGGGTTTGGAGCAGTCACGTTTGGGGAGTGTGCATAGCTTTTAACCAAGAGTCAAACCTGT
TCAGACAGAAGGCAGTCACAGCAGAAAAATCTTCAGACAAAAGGCAGTCACAGGTGTGCAGGGAGTGTGGGCGAG
GCTTTAGCAGGAAGTCACAGCTCATATACACCAGAGGACACACAGAGGAAGAAAGCCTTATGTCTGCGGAGAGT
GTGGCGAGGGCTTTATAGTTGAGTCAGTCTCCGCAACCACCTGAGTACACACTCCGGGGAGAAACCTTATGTGT
GCAGCCATTGTGGGCGAGGCTTTAGCTGCAAGCCATACCTCATCAGACATCAGAGGACACACAAAGGGAGAAAT
CGTTTATGTGCACAGTGTGGGCGAGGCTTTCGTGAAAAGTCAGAGCTCATTAAAGCACCAGAGGTGTCAAGTGA
CGGTCCCCTTGGAGGAATGGTCTTTGCATCTGACTACTTCCCTCTGCAACTGTGTTCTTCCATTAGCTTCCATGA
CACTCTCTGCTTTATTTTTTTCTACATCTCTAGCCTTTGCTGTTTCCCTACCCACCTTTAGATTTTTACT
CAGAGTTCAGTCTCCAGCCCTACAATCTGAGGGACACCTTTACCAAGTCCCTTCCTAACCTTCAGTCCCAAAAT
CCAAGATTCTTTAACACACTCTAAAAGTTCTTCAGACTCAGGACTTAAACATAGCCACGCCACCTTGGCCTTCA
ATGACAGGATCTAGCAATGCTGCATCATCAGCCTTCCAATACAGGTTTAAAGGGTATTTTAAACACAGCTCCCTC
TTAAATCCTCCAATCTCAGTACCCAGTGTTTTAGCCATGCTCGGGTGGCTAAATTACATCCAGGAATGGTGCCAG
GGCCTTTAGCCATTTGTCTCTCCTCACACTCCAGGGCCCATATGGCCAGGTCTGACAGTTTGGCTTACTCCCT
TGGGCTGGGGCTAGCCCTACCTGATACCCCTGTGCTCAATGAGTGTACCTTGGAGAGCTATCCACTCAGGCCCCAGT
GCCTCTATTGCTAAGGAGCTCTGCCACAGAAAAGAGGGGAGAGATGTTCAATGTAACCTCAAAATACTTAGGCT
TGGTTTTGATGCTAGAGAGGAAAAAGGACTTGGAGAGAGAGAAGGAATGGCTGGTCCAGAGGCTTTTGTCCACTC
CCTCTACTGGAAGTGGTTGATCTCCAGGGAATCCCCAAGGTTAGCCTGCTTAGGGGAAGGGCTAGGGGTACCTG
GAATGTAGGATCTCCCCATGCTCCCTGGCCTACCAACCTTAATGTGCTGGAATTGGTGGGTTCTTGGCTCTGCTGAC
TTCAAGAATGAAGCCCTGACCCCTCAGCGTGAGTGTACAATTTCTTAA

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FIGURE 1131

CAGCGTGCCTGCCAGTGTAGAGCCGGTGGAGCAGCTGGGCTCGGCGCTGAGGTTTCGCCCTGGCTACAACGACCC
CATGTACAGGGTTCGGAGCGACCTTGGCCGTTGGCCTGACCATCTTTGTGCTGTCTGTGCTCACTATCATCATCTG
CTTCACCTGTCTCTGTGCTGCCCTTTACAAGACGTGCCGCCGACCAGCTCCCTCCAAGTGTGCCGCCAGCTACC
CTGGACCAAGCTACCAGGGGTACCACACCATGCCGCCCTCAGCCAGGGATGCCAGCAGCACCTTACCCTAATGCAGT
ACCCACCACCTTACCAGCCCCAGCCCATGGGCCACCGGCCCTACCACGAGACCTTGGCTGGAGGAGCAGCCGCCG
CCTACCCCGCCAGCCAGCCTCCTTACAACCCGGCCTACATGGATGCCCCAAGGCGGCCCTCTGAGCATTCCTTG
GCCTCTCTGGCTGCCACTTGGTTATGTTGTGTGTGTGCGTGAGTGGTGTGCAGGCGCGGTTCTTACGCCCCATG
TGTGCTGTGTGTGCCAGGCACGGTTCCTTACGCCCATGTGTGCTGTGTGTGCTGCTGCTGTATATGTGGCTTC
CTCTGATGCTGACAAGGTGGGGAACAATCCTTGCCAGAGTGGGCTGGGACCAGACTTTGTCTCTTCTCACCTG
AAATTATGCTTCTTAAATCTCAAGCCAAACTCAAAGAATGGGGTGGTGGGGGGCACCCTGTGAGGTGGCCCCCTG
AGAGGTGGGGCCCTCTCCAGGGCACATCTGGAGTTCTTCTCAGCTTACCCTAGGGTGACCAAGTAGGGCCTGTG
ACACCAGGGTGGCGCAGCTTCTGTGTGATGCAGATGTGTCTGTTTTCGGCAGCGTAGCCAGCTGCTGCTTGAG
GCCATGGCTCGTCCCCGGAGTTGGGGGTACCCGTTGCAGAGCCAGGGACATGATGCAGGCCAAGCTTGGGATCTG
GCCAAGTTGGACTTTGATCCTTTGGGCGAGATGTCCATTGCTCCCTGGAGCCTGTGATGCTGTTGGGGATCAGG
CAGCCTCTGATGCCAGAACCCTCAGGCAGAGCCCTACTCAGCTGTACCTGTCTGCCCTGGACTGTCCCTGTCC
CCGCATCTCCCTGGGACCAGCTGGAGGGCCACATGCACACAGCCCTAGCTGCCCCAGGGAGCTCTGCTGCCCC
TTGCTGGCCCTGCCCTTCCCACAGGTGAGCAGGGCTCCTGTCCACCAGCACACTCAGTTCTCTCCCTGCAGTGT
TTTCATTTTATTTTAGCCAAACATTTTGCCCTGTTTCTGTTTCAAACATGATAGTTGATATGAGACTGAAACCCC
TGGGGTTGGAGGGAAATTGGCTCAGAGATGGACAACCTGGCAACTGTGAGTCCCTGCTTCCGACACCAGCCCTC
ATGGAATATGCAACAACTCCTGTACCCAGTCACCGTGTCTTGGCAGCAGGGACACCTGGGCCAATGGGCCATC
TGGACCAAGGTGGGGTGTGGGCCCTGGATGGCAGCTCTGGCCAGACATGAATACTCGTGTCTCTCTCCCT
CTATTACTGTTTACCAGAGCTGTCTTAGCTCAAATCTGTTGTGTTTCTGAGTCTAGGGTCTGTACACTTGTITA
TAATAAATGCAATCGTTTG

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FIGURE 1132B

TGGAGGGGAACATCCCTGAGCTGTTCCAAATGGACATCTTCTCTGGAGAACTGACGGCACTCATTGACCTAGACT
ATGAGGCTCGCCAGAAATATGTGATGTGGTGCAGGCCACATCTGCTCCTTTGGTCAGCCGGGCCACTGTGCAGC
TCGCGCTGGTTGACCCAGAAATGACAAACGCCCTGTGCTCAACAACTTCCAGATCCTCTTCAACAACTATGTATCCA
ACCGTTTCAGACACCTTCCCGTCGGGCATTATTGGGGCATCCACGCTTATGACCCCGATGTCTCCGACCACTCT
TCTACTCCTTTGAGCGTGGCAATAGCTGCAGCTGCTGGTAGTCAACCAGACCAAGTGGGGAGCTGCGACTCAGCC
GAAAGCTAGACATAACCGCCCACTGGTGGCCTCCATGTTGGTAGCTGCACAGATGGCTGCACAGCGTGACGG
CGCAGTGTGTGCTGCGCGTGGTCAATCATCACGGAGAGTGTGCTGGCCAACAGCCTGACCGTGGCGCTTGAGAA
CTGTGGCAGGAGCGCTTCTGTACCGCTGCTGGCGCGCTTCTCTGAGGGCGTGGCTGCGGTGCTCGCTACGCCCG
CTGAGGACGCTTTCATCTTCAACATCCAGAACGACACAGCTAGGGGGCACCCTGCTCAATGTGAGTTTCTCGG
CGCTAGCTCCACGTGGGGCGGGCGGGCGCTGCAGGGCCCTGGTTGAGCTCCGAGGAGCTGACGAGGACAGTTGT
ACGTGCGCGGGCGCGCTGGCGGCTCGCTCCTTGTCTGACAGTACTGCCCTTCGACGACAACTGTGCTGCGAG
AGCCCTGTGAGAACTACATGAAATCGGTGTCCGTGCTCCGCTTTGACTCGTCCGCGCCTTCTCGGCTCGGCT
CCACGCTGTTCCGACCCATCCAGCCCATCGCTGGCCTGCGCTGCGCTGCCCGCCGAGTTACGCGGAGACTTTT
GCGAGACCGAGCTCGACCTTGTGCTACTCCAAACCATGTGCGAACGCGGAGCCTGCGCGGGCGCGAGGGAGGCT
ACACGTGCGCTGCGCCCGCGCTTACCGGAGAGGACTGCGAGCTGGACAGCGCGCCGCGCTGCGTCCGCGG
CGCTGTGCGCTCAACGGGGGACACTGACCGACGCGGCCAACGCGGCTTTCGCTGACAGTGGCGCGGCGGGG
CCTTCGAGGGCGCGCTGCGAGGTGGCTGCGCGCTCCTTCCCGCCAGTTGCTGCTCATGTTTCGCGGCTGCG
GGCAGCGATTCCACCTTACGCTGTCCCTCTGTTTCGCGACAGTGCAGCAGAGCGGCTGCTCTTACAAAGGGC
GCTTGAACGAGAGCAGCACTTCTGCGCCTGGAACCTGCTGGCTGGCCAAGTCCGGCTACAGATTTCACGGGTG
AATCCAACACCGTGGTCAGCGCCACAGTTCCAGGGGGCTTGAGTGACGGGCAATGGCATACAGTGCATGAGAT
ACTACAACAAGCCCGGACAGATGCCCCAGGGGGTGCACAGGGCCCTTCAAGCAAGGTGGCTGCTGTAAGG
TGGATGATTGTGATGTGGCCCTGGCTCTGCACTTTGGTGTGAGATTGGCAACTACTCATGCCGCGCTGCTGGTG
TGCAACAAAGCTCCAAGAAAGTCCCTGGACCTGACGGGCCCTCTTCTTCTGGGAGGTGTCCCCAACCTCCCCGAGA
ACTTCCCGTAATCCATAAGGACTTATCGGCTGTATGCGGAGCTGCACAGTTGATGGCCCGCGAGTGGACATGG
CGGCTTTTGTGCGAAATATATGGACCATGGCAGGCTGCCAAGCCAAGCTACACTTTTGATCTCAGGCCCCCTGCA
AGAACAGTGGCTTCTGCTCGGAGCGCTGGGGCAGCTCAGCTGCGACTGCCCTGTGGGCTTGGCGGCAAAAGCT
GTACGCTTACTATGGCCATCCGCCACATTTCCGTGGCAACGGCACACTGAGCTGGAATTTGGAAGTGACATGG
CTGTGTCTGTGCCATGGTACCTGGGGCTGGCAATTTCGACACAGGGCAACGACAGGGGGTCTGTATGCAAGTGCAGG
CTGGGCGACACAGCAGCATCCTTTTGGCAGCTAGATCGGGGTTACTGTCTGTGACAGTGAACAGGGGCTCGGGCC
GTGCTTCCCATCTCCTTCTGACACAGGTGACTGTGAGTGTATGGCCGTTGGCAGCATCTGCGGCTGGAGTGCAGG
AGGAACCAAGTGGCGCGGGGCCACCATGTCTTATGCTTCAAGCTGGAATTTAGCCCTTTCAGAGCAACATGG
CGGTGGAGGTGAGCTGTGAGGGCTGAAAGTAAAGCAGCTGCCAGTGGGAGGCGCTGCCCGCGGAGTGCAGAGG
AGGCTCTCAGGGCTGTGGTGGCTGCATCCAGGGGGTGTGGCTCGGCTCCACACCTCTTGCTTCCCCCGGCTGCG
TACCCCCAGCCACCGAGTGAATGCGGAGCCTGGCTGTGTTGTGACCAAGCCTGTGCTCTGCGGCTGCGGCACT
CTCACGCACTGCGGGGACCTCTGCGAGACCTTTTCTGCACTGCCAGCCAGGTTACTACGGCCAGGCTGTGTG
TGGATGCTGCTCTCTGAACCCCTGTGAGAACAGGGATCATGCCGGCACCTGCCAGGAGCCCCCATGGCTATA
CCTGTGACTGTGTGGGTGGCTATTTCGGGCACCACTTGGCGTCTGCGCACAGTGGACAGTGGCCACGGGCTGGT
GGGGAGAGCCAACTGTGGGCCCTGCAACTGTGATGTTACAAAGGTTTGTATGCCAACTGCAACAAGACAAATG
GGCAGTGTCACTGCAAGAGTTCCATACCGACCGCGGGCAGTACTCTTGCTCCCATGTGACTGTGCTACCCCTG
TGGGCTCCACCTCGCGCTCATGTGCACCCACAGCGGGCAGTGGCCCTGTGCGCCAGGAGCCCTTGGCGCGCAGT
GCAACAGCTGTGACAGTCCCTTTCGAGAGGTGACAGCAGCGGCTGCGGGGTGCTTATGATGCTGCCCTAAGT
CCCTGAGATCTGGTGTGGTGGGCCCAAGAAAGTTGGCGTCTGCGCACAGTGGCCCTGCGCGGGGGGGCC
TGGGTGCTGCTGTGCGGCTGTGTGATGAGGCCAGGGTTGGCTGGAGCCGACCTTTCACAGTGTACCTCCCCGT
CCTTTCGAGAGCTCAGTGTGCTGCTGGATGGCTAGACTGAACAAGACGCACTGGATACCATGTGAGGCAAGA
AGCTGGCTCAGCGGCTACGGGAGGCTGACTGGCCACACTGACCACTATTTTGAACCAAGATGTTGAGTCACTGCCC
GCTTGTGCGCCACCTGCTGGCTTCGAGACCATCAGCAGGCTCTGGGCTGACAGCCACAGGATGGCCACT
TCAATTGAGAACTGTGCTGTGGCGCGCTCTGCACTGCTTGGCCAGAGCAAGGACTGTGGCGCGGCTGGGCG
AGCGGGCCCCCTGGGGGCTCCCCAGGACGCGGGAGTGTGTGAGGCACCTGGAGGAGTATGACGCCCACTGCGAA

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FIGURE 1132C

GGAATATGGAACACACATACCTGAATCCCATGGGGCTGGTGACGCCATAATATCATGCTCAGCATTGACCGCATGG
AGCACCCCACTTCTCCCGGGGGGCGCGCTCGCTACCCCTCGCTACCATAGCAACCTCTTTTCGAGGCCAGGATGGCT
GGGATCTCTACACCAATGTGCTGCTGCCCTCCAGTCGCCACGGCCATCCCATCTGAAGTTCTGCCCAACAAGCA
GCAGCATAGAAAACTCCACCACCTCAAGTGTGTGTCCTCCCGCCACGAGCCCGCCAGAGCCAGAGCTGGGATCTCCA
TTATCATTTCTCTGTTTACCGCACTTAGGGGGAGTGTCTCCCTGCCAGTTCCAGGCAGAACGCCGAGGTGCCA
GGCTTCTCAGAAACCCGTCATGAATCCCGCGTGGTCAGCGTGGCTGTGTTCCACGGACGCAACTTCTTAAAGG
GAATCTGGAGTCCCCCATCAGCCTAGAGTTTCGCCCTGCTACAGACAGCGAATCGGAGCAAGCGCATCTGTGTGC
AGTGGGACCCACCTGGCCTGGCGGAGCAGCATGGTGTGTGGACAGCAGGGACTCGGAGCTGGTGACAGGAATG
GGTCCACGACGGTGTGCTGTGTCAGCGCGGACAGGGACCTTTGGGGTCTCATGGATGCCCTCTCCCGTGAGAGGC
TGGAGGGCGACCTTGAGGCTGCTGGCTGTGTTCAACCCAGTGGTGTGCTGTGCTGTGGCTGCGCTGGTGTGTA
CTGCAGCCATCCTGTGAGCCTGGCAGCCTCAAGTCCAATGTGCGTGGGATCCATGCCAATGTGGCAGCCGCC
TGGGGTGGCAGAGCTCCTCTTCTGCTGGGATTACAGGACCCCAATCAGCTGGTGTGCACTCGAGTCGACGCCA
TCTCTCTGCACTACTTCTTCTCAGCACCTTCGCGTGGCTCTCTGTGCAAGGGCTGCACTCTACCGCATGCAAG
TTGAGCCACGCAACGTGGACCGCGGCCCATGCGCTTCTACCATGCCCTGGGCTGGGCGTCCCTGCTGTGCTGC
TGGGCTTGTCTGGGCTGTGACCTTGAGGGCTATGGGAACCTTGACTTCTGCTGGATCTCAGTCCACAGGCCCC
TCATCTGAGCCTTGTCTGGCCCTTGTGTCTGCTCATAGTGATGAACGGGACCATGTGTTTCTCTGCTGCTGGCCGA
CATCTGCTCCACAGGGCAGAGGGAGGCCAAGAAGACCTCTGCACTGACCTTCGACGCTCTCTCTGCTGCTGC
TGCTGGTCAGTGCTCTCTGGCTCTTTGGGCTCTTGGCAGTCAACACAGCATCTTACCTTCTTCACTTCCATG
CTGAGCTCTGCGGCTCCAGGCTCGGCGTGGCTGTGCTGCTCTCTGTGCTTAAATGCAGATGCTCGGGCTGCT
GGATGCCAGCGCTGTCTGGGAGGAGGCCGCGCTGAGGAGGCAAGGCCAGCACTGGGCTGGGACTCTGGGCGCT
ACAACAACACGGCTCTCTTTAGGAGAGTGGCTCTATCCGATCACTCTGGCGCTCCACCGTCTCTCTGTGTA
GCAGTGGCCGCTCCGCGGJACCAGGACAGGACAGCAGCGGGGCGCGAGCTACCTCAGGGACAATGTCTTGG
TTCGATATGCTCAGCCGCTGACCACTGACCCAGCCTCCAGGCTCATGTGCGCCCATGACTGACCTGGAGCGTGG
CCATGTTCCATAGATGCTGGGCGAGACTCCGACTCTGACAGTGACCTGCCCTTGGAGGAGGAGAGGACTCTCT
CCATTCCATCTCAGAAAGCGAGGACAAATGGCCGGACGCGGGGGCGCTTCCAAACGGCCACTCTGCCGAGCAGCC
AGAGTGAGAGGCTCTTCAACCACCCCAAGATGTGGATGGCAATGACCTCTGTGCTCTACTGTGGCCAGCCCTGGGG
AGTGGAGGCGAGCCCTGTGCTCTGCAGACTTGGGGCTCTGAAAGGCGCTGGGGCTGGAACACAGCAAGGATG
CAGCTAACAACAACCGCAGCAGCCGGCCCTGACCACTGGGGATGAGACTTCTTGGGCGGGGCCAGCGCCGAG
GGAAAGGCATCTGAAGAACCGGTTGCAATACCACTGGTGCCACAGACCCAGGTGCCCTGAGCTGTCTGTGT
GCCGTGCAGCCACTTGGGCCACCGTGCAGTGCCAGCTGCCTCTTACGTTGCGACTCATGTCTGGCGGGGGCAGG
GCGAGCCTTTACAGGCCAGCCAGCGCTACTCTTCTAGAGAACAGCTGGACCTGCTCTCTCGGCGCACTGAGCC
GTGAGCGACTAGAGGAAGCCCCTGCCCTGTTCTACGTCCTGAGCCGGCCAGGGTCCCAGGAATGCATGGATG
CTGCACAGCGCGACTTGAGGCCAAGAGCTCGGGGCGAGCAGCTGCCACGGAGGCGAGCCACTCGGGACTACCTGT
GCGCCATGGCTGGCGCTCTGGGTCACGGGATGCGCTGCACTTAGGGGCGAGCTTACGAGTGTGAGCAGCTGC
CTCCGCCCCGCGCACCCGGGACCTTGACCCACAGCCCCACCTCTGCCCTGTCTCCCGAGGGCACTCTCAA
GGGACCCCTCTTGCCATCCCGCGCGCTGGACTCTGTCTAGGAGCTCGAATCTCGGAGCAGCTGGGACGACT
TGCTAGCGGCGACCCCTCAGCAAGGCCCTTGGGCACTCCGCGAGCTCTCAGAGCTAGGGAGGACTCGGTCA
GTGGGCCCGGCCATGGCCCTTCCAGAGAAGTGGACATCTTCTTCTCATCTTGCTCTTCTCAACTCTCTCGG
CCCTCTCTCTGTGCAACTTCTAAGACACCCCTTGGGCGCTCACACCACTGCCACTCTTCTGCACTCTGCACTCTG
TGCTTGGGCGCTCCAGCCACGTTCTGCCAGCTCTCAGCATCTCGGAGCTGTGCGCAGACTCAGAAGTCTCCA
AAGTGAAGGCTCACTCTGAGGGGATGACGGCTGGACAGGAGAACAGCTGAGGGCGCAGAGGATCTAGGCTAAC
AGGAGAGACTCCAGAGTGGGGGCGAGATCCCAAGGCAAGCTTCTGCTCCCGAGTGGTGGTGGCCAGCTTACC
TGGTGTGGCAGGGCTGAGCTTCAATGTGCATCTGTAGCATGCTGTGACAGGTGCAGAGACGGGGAGTGGAGG
GAGACTTTTATACGTTTGTGACTTGTGAACGAGAGATGCTATGTTATTTTTCAGCTTTTCTGTCTCTGCTGG
GGGTTTGAAGCTGGGCTGGGAGGGGGAGGAGATAGAGGGAGAGATGCAAGTTTGACCCCATTTGGGTCTTGAGCA
AACCTTATGCTCATCTCTCTCTCTCTGGGGTGGACTCAGATGGGTGGGACATGCTTCTCTCCCCCTATTTC
CACCCCCAAGTGTGATCTGAGTATCTGACGGGGCCAAAGTACAGAATTGTCTTGTGTTTATTGTAATGCTCCA
AAGGCCAACTTCTGGGGCTGGGGGTGTGCTTGGAAACAGGGGTCTCTGACTTCTCTATGGGGGCTTGTCTCAT

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FIGURE 1132D

ACCGCCCCCTCCTGGTGGATGTGTGTGTTATTATGTGGAGTCCCTGCCACTTACTGCCTTATGACCTAGGACTGA
TGCTGTGGGGTGCTGGTGGAGCAGCTGATGTCGTGTTTACAGAGCAAGGCTTCCCTGTCTCCACGGGGAGGGGC
TCGGCCCTCTAGTCAGACATTCTGCAGAGGTCGGTGGAGGGGTCATTACCTGCCCTGCAGCAAGCAAAAGT
TGCTGTGGTGCCATTGATTCCCTGACACTGCCCCCTGCTTGAATTGATCCGAAGGGTAGGGTGGGAAGGTGA
GCAAAGGGAGCAGAAACAAGGGAATTCAAGACCCAGAAATGTAGGTGCCACTGCCCTCCTATGTTACAGGATCCTC
CGTGGCCCTAGGCACCTGGGCTGCAGGAAGTGACTCCGTTCCACTCCTCCTTTATTCCCTTAAAAAGGGAAAAAT
GACTGTTACGACCCCTGTTACAAAACTCTTACTTTTGCTATTTTGTCTGCTGTCAGAACTGAAGACTTTAAAAAT
TTTGTTACTGTTTACAAGTCCAGATTCAAAAATGTTTTTACTTTGTTTACAACTCAAACTTTGAGTTTTACAC
TTTGTTTACAGTAGATAATTTTTTTTCCCTTTGTTTCCAAGTGAAGGTAGGGAAAGTGGGAGAGGGACTTGGAGG
ACCCACCTGTGAGGACCTGACCTGGCCATCTTGAGGGGTTTTCTAACCCCCAGGTCTCCCAGGCCGAAGGTCAG
CCTTGAGTCCCGTTTAAACAGCAGATCCAGAAGACCTTGAGAGTAGGCGTCCCTTAACCACGGGGAGAGTGGCTG
TGCAGGGCTGGGGGGTGGTCTGTGACAGACCTCCTCACCCACCACCCCATGCTACTCTGGGAAGCAGCTTCC
TGGGAGATTAGAAATCTACTTCCCTGACTGGAGCTAAATCCCACCAGCCAGGACCCAACTCTCCTTACCGAGA
AGGACCCAGCTCTTGAAGGGCTGAGTGGCCTGCTGGGGGTGGAGGGTGTCTTTACTATGCTCTAGGTTTCGTA
GATGCCCTCTCTGGGGTTCCCTCCTCCAGCCCAGCGCCCTCTTCCCTGTCTGTGAATTTGTTCCGTGAAGC
CGCGCTCTGTTTTGGGAATAAACTTCTATAGAAAACAAAA

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FIGURE 1133

MMARRPPWRGLGERSTP I L L L L L S L F P L S Q E E L G G G G H Q G W D P G L A A T T G P R A H I G G G A L A L C P E S S G V R E D G G
P G L G V R P I F V G L R G R Q S A R N S R G P P E Q P N E E L G I E H G V Q P L G S R E R E T G Q G P G S V L Y W R P E V S S C R T G T P L Q R
G S L S P G A L S S G V P G S G N S S L P S D F L I R H H G P K P V S S Q R N A G T G S R K R V G T A R C C G E L W A T G S K G Q G E R L T T S G A
E R T A P R N C L P G A S G S G P E L D S A P R T A R T A P A S G S A P R E S R T A P E P A P K R M S R G L F R C F L P Q R P G R P P G L P A
R E A R K V T S A N R A R F R A A N R H P Q F P Q N Y Q T L V P E N E A A G T A V L R V V A Q D P D A G E A G R L V Y S L A A L M N S R S L E L
F S I D P Q S G L I R T A A A L D R E S M E R H Y L R V T A Q D H G S P R L S A T M V A V T V A D R N D H S P V F E A Q Y R E T L R E N V E E G Y
P I L Q L R A T D G D A P P N A N L R Y F V G P P A A R A A A A A F E I D P R S G L I S T S G R V D R E H M E S Y E L V V E A S D Q G Q E P G P R
S A T V R V H I T V L D E N D N A P Q F S E K R Y V A Q V R E D V R P H T V V L R V T A D R D K D A N G L V H Y N I I S G N S R G F A I D S L T G
E I Q V V A P L D F E A E R E Y A L R I R A Q D A G R P P L S N N T G L A S I Q V V D I N D H I P I F V S T P F Q V S V L E N A P L G H S V I H T Q A
V D A D H G E N A R L E Y S L T G V A P D T P F V I N S A T G W S V S G P L D R E S V E H Y F F G V E A R D H G S P P L S A S A S V I T V T L D V N
D N R P E F T M K E Y H L R L N E D A A V G T S V S V T A V D R D A N S A I S Y Q I T G G N T R N R F A I S T Q G G V L V T L A L P L D Y K Q E R
Y F K L V L T A S D R A L H D H C Y V H I N I T D A N T H R P V Q S A H Y S V S V N E D R P M G S T I V I S A S D D D V G E N A R I T Y L L E D N
L P Q F R I D A D S G A I T L Q A P L D Y E D Q V T Y T L A I T A R D N G I P Q K A D T T Y E V M V N D V N D N A P Q F V A S H Y T G L V S E D A P
P F T S V L Q I S A T D R A H A N G R V Q Y T F Q N G E D G D G F T I E P T S G I V R T V R R L D R E A V S Y E L T A Y A V D R G V P P L R T P
V S I Q V M V Q D V N D N A P V F P A E F E V R V K E N S I V G S V A Q I T A V D P D E G P N A H M Y Q I V E G N I P E L F Q M D I F S G E L T
A L I D L D Y E A R Q E Y V I V Q A T S A P L S R A T V H V R L V D Q N D S P V L N N F Q I L F N N Y S N D I P S S T F F S G I G R P P A Y D P
D V S D H L F S F E R G N E L Q L L V N Q T S G E L R L S R K L D N N R P L V A S M L V T V D G L H S V T A C C V L R V V I I T E E L A N S L
T V R L E N M W Q E R F L S P L L G R F L E G V A A V L A T P A E D V F I F N I Q N D T D V G G T V L N V S F S A L A P R G A G A C A P W F S S E
E L Q C Q L Y V R A A L A A R S L D L V L P F D D N V C L R E P C E N Y M K C V S V L R F D S A P F L A S A T L F R P I Q P I A G L R C R C P P
G T G D F C E T E L D L C Y S N P C R N G G A C A R R E G Y T C V C R P R F T G E D C E L D T E A G R C V P G C R N G G T C T D A P N G G F R C
Q C P A G G A F E G R C E V A A R S F P P S S F V M F R G L R Q R F H L T L S L F A T V Q Q S G L F Y N G R L N E K H D F L A L E L V A G V M R
L T Y S T G E S N T V V S P T V P G G L S D G Q W H T V H L R Y Y N K P R T D A L G G A Q G P S K D K V A V L S V D D C D V A V A L Q F G A E I G N Y
S C A A A G V Q T S S K S L D L T G P L L L G G V P N L P E N F P V S H K D F I G C M R D L H I D G R R V D M A A F V A N N G T M A G C Q A K L H F
C D S G P C K N S G F C S E R W G S F S C D C P V G F G G K D C Q L T M A H P H F R G N G T L S W N F G S D M A V S P W Y L G L A F R T R A T Q G
V I M Q V Q A G P H S T L L C Q L D R G L L S V T T R G S G R A S H L L D Q V T V S D G R W H D L R L E Q E E P G R R G H H V L M V S L D F S
L F Q D T M A V G S E L Q G L K V Q K L H V G G L P P G S A E A P Q G L V G C I Q G V W L G S T P S G S P A L L P S H R V N A E P G C V N T N A C
A S G P C P P H A D C R D L W Q T F S C T C Q P G Y Y G F G C V D A C L L N P C Q N Q G S C R H L F G A P H G Y T C D C V G G Y F G H C H E R M D Q
Q C P R G W G S P T C G P C N C D V H K G F D P N C N K T N G Q C H K E F H Y R P R G S D S C L P C D C Y P V G S T S R S C A P H S G Q C P C R P
G A L G R Q C N S D S F A E V T A S C R V L Y D A C P K S L R S G V W W P Q T K F G V L A T V P C P R G A L G A A V R L C D E A Q W L E P D L
F N C T S P A F R E L S L L D G L E N K N T A L D T M E A K K L A Q L R E V T G H T D H Y F S Q D V R V T A R L L A H L A F E S H Q Q G L T
A T Q D A H F E N E N L W A G S A L L A P E T G D L W A A L Q R A P G G S P G S A G L V R H L E E Y A T L S S E N I T Y L N E M G L V T P N I M
L S I D R M E H F S S P R G A R R Y P R S H N L F R G Q D A W D P H T H V L P S Q S P R P S P E V L T I A R R I N S E N S T S S V P P P A P P E
P E P G I S I I L L V V R T L G G L L P A Q F Q A E R R G A R L P Q N F V M N S P V S V A V F H G R N F L R G L E S P I S L E F R L L Q T A N R
S K A I C V Q W D P F L G A E Q H G V T A R D C E L V H R N G S H A R C R S R T G T F G V L M D A S F R E R L E G D L L A V F T H V V A V S
V A A L V L T A I L L S R L S K S N V R G I H A N V A A L G V A E L L F L L G I H R T H N Q L V C T A V A I L L H Y F F L S T F A W L F V Q G L
H L Y R M Q V E P R N V D R G A M F Y H A I G W G V P A V L L G L A V G L D P E G Y G N P D F C W I S V H E P L I W S F A G P V V L V I V M N G M
F L L A R Q S C S T G Q R E A K K T S A L L R S S F L L L L V S A S W L F G L L A V N H S I L A F H Y L A G L C G L Q G L A V L L E C V L N
A D A R A A M P A C L G R K A A P E A R P A P G L G A Y N N T A L F E E S G L I R I T L G A S T V S V S S A R S G R T Q D Q S Q R G R S Y
L R D N V L V R H G S A A D H T H S L Q A H A G P T D I D V A M F H R D A G A D S D S D L S L E E R S L S T P S S E S E N D N G R T R G R F Q R
P L C R A A Q S E R L L T H P K D V D G N D L L S Y P A L G E C E A A P C A L Q T W G S E R R L G L D T S K D A N N N Q P D A L T S G D E T S L
G R A Q R K G L K N R L Q Y P L V P Q T R G A P E L S W C R A A T L G H R A V P A A S Y G R I Y A G G G T G S L S Q P A S R Y S S R E Q L D L L
L R R Q L S R E R L E E A P A P V L R P L S R F G S Q E C M D A A P G R L E P K D R G S T L P R Q P R D Y P G A M A G R F G S R D A L D L G A P R
E W L S T L P P P R R T R D L D P Q P P L P L S P Q R L S R D P L L P S R P L D S L S R S S N S R E Q L D Q V S R H P S R E A L G P L Q L L R
A R E D S V S G P S H G P S T E Q L D I L S S I L A S F N S S A L S S V Q S S T P L P H T T A P S A T A S V L G P S T P R S A T S H S I S E L S
P D S E V P R S E G H S

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FIGURE 1134

TACTGACTTTTTCAGCACCAACTTGTGGTCCCGAGGTAAGTTTCCACGCTGGTACTTTAGCCCTGGGCTCGAACCTGC
GGACACGCTGTGGCTGCAACTCCCCGCCGCCAGACCTCAGTACGCAGCGCGGCTGGTGAGAAACATAATGCACT
CTGACTTCCACGCGTGGAAATGGGAGATGGACTGCACGGCGGGCGGACCTGCTCGGGCTGATGGACGGCAGGTGG
ACTGATGTGCGCAGGGACTGGCGGCAGCGCGGTGAGAGCCAGTCAGCCAAAGCCAGGCCAGCACAAATAGACTGTCT
CCGGTTCCCCGCCAGGAGGCGGCCGAGCACCAACTGTACGGTACTGCGCCTGCGCCGCCAGCCCAACGCGCCAG
TCTACGCTTGC CGCGCGCAACAGGGCCGACTGCAGCTGGAAATGCGCGGCTGCCGTGGTCTGTGCGGGCCGCTACC
GCCGGGGCACAAGTGCTATTGCGCGCCCGCGCTGCGCCGGCCCTGCTGCGGAGCCAGCCTTGGCGAGTACGGCA
ACCTTCGCTCAGGCGCTCCAGTTCGTGCGGAGACGCGAGGTTAGCCTGCTGGACAACGGCTGCGTGTGGCTCC
GAGCAGTCTCTCAGCCCACTTGCACGGTGGGAGTGTGGATTGATGTTGGCAGCCGTTTGGAGACTGAGAAGAAT
AATGGGCGAGGCTACTTTTTGGAGCATCTGGCTTTCAAGGGAACAAAGAATCGGCCCTGGCAGTGCCCTGGAGAAG
GAGGTGGAGAGCATGGGGGCCCATCTTAATGCCTACAGCACCCGGGAGCACACAGCTTACTACATCAAGGCGCTG
TCCAAGGATCTGCCAAAGCTGTGGAGCTCCTGGGTGACATTGTGCAGAACTGTAGCTCGGAAGACTCACAGATT
GAGAAGGAACGTGATGTGATCCTGCGGGAGATGCAGGAGAATGATGCATCTATGCGAGATGTGGTCTTTAACTAC
CTGCATGCCACAGCAITTCAGGGCACACCTCTAGCCCAAGCTGTGGAGGGGCCCCAGTGAGAATGTGAGGAAGCTG
TCTCGTCGAGACTTGACCGAGTACCTCAGCACACATTACAAGGCCCTCGAATGGTGTGCGCAGCAGCTGGAGGA
GTGGAGCCACAGCAACTGTGAGCTTCGCCAGAACCTCGGTGGCATCCCATGGACATATGCAGAGGACGCT
GTGCCCACTCTTACTCCATGCGCTTCACTGGCAGTGAGATCCGCCACCGTGATGATGCTTACCTTTTGCCCA
GTGGCCATTGCGATAGAGGGTCTTGCTGGGCCAGCCCGGACAGTGTGGCTTGAAGTGGCCAATGCCATCATC
GGCCATATGACTGCACTTATGGTGGTGGCGTGCACTGTCCAGCCCACTGGCTTCAAGTGCTGTGGCCAACAAG
CTATGCCAGAGTTTCCAGACCTTCAGCATCTGCTATGACAGACGGGCTTGTGGGTGCACATTTGTCTGTGAC
CGAATGAAAATCGATGACATGATGTCTGCTCGCAAGGGCAGTGGATGCGCTGTGTACCAAGTGGCAGCGAGAGT
GAGGTGGCCCGGGGCAAAAACATCTCAGAAAATGCCCTGGTATCTCATCTAGATGGCACTACTCCTGTGTGTGAG
GACATCGGACGCGACGCTCCTGACCTATGGCCGCCGATCCCCCTGGCTGAATGGGAAAGCCGGATTGCGGAGGTG
GATGCCAGTGTGGTACGTGAGATCTGCTCCAAGTACATCTATGACCAAGTCCCCAGCAGTGGCTGGATATGCCCC
ATTGAGCAGCTCCAGACTACAACCGGATCCGTAGCGGCATGTCTGGCTGCGCTTTAGCGGGGAAGCCATGT
AAGCAAGAGGGCAGGGCCGGGGTTGTGTGTCCTCCCGCCACCAACACAGCACTTCGGCTCCTCTAACCTGTG
CCACAGGTGACCCCAATAAAATCCTCTGCTGAGA

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FIGURE 1135

MAASVVCRAATAGAQVLLRARRSPALLRTPALRSTATFAQALQFVPETQVSLDNGLRVASEQSSQPTCTVGWVI
DVGSRFETEKNNAGYFLEHLAFKGTKNRPGSALEKEVESMGHNLAYSTREHTAYYIKALSKDLPKAVELLGDI
VQNCSEDSQIEKERVILREMQENDASMRDVVFNYLHATAFQGTPLAQAVEGPPSENVRKLSRADLTEYLSTHYK
APRMVLAAGGVEHQQLDLAQKHLGGIPWTYAEDAVPTLTPCRFTGSEIRHRDDALPFAHVAIAVEGPGWASPD
SVALQVANAIIGHYDCTYGGGVHLSSPLASGAVANKLCQSFQTFSCYAEETGLLGAHFVCDRMKIDMMFVLQGG
WMRLCTSATESEVARGKNILRNALVSHLDGTTPVCEDIGRSLTYGRRIPLAEWESRIAEVDASVVREICSKYIY
DQCPAVAGYGP IEQLPDYNRIRSGMFWLRF

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FIGURE 1136

TCCGACTCATCCCGGCCCGGGATGGCGTCCCCACGGGAATTGACACAGAACCCCTGAAGAAGATCTGGATGCC
ATACAGCAATGGCGGCCCGCTCTGCACGCTTGCCAGCGCGGTGTGTGCATGACCACTGCCCAACTCTCATTGT
CATGGTGGCGCTGCCCGCAGGGGCAAGACCTACATCTCCAAGAAGCTGACTCGATACCTGAACTGGATTGGTGT
GCCCACTCGGGAGTTCAATGTGTGGCCAGTATCGCCGGGACGTGGTCAAGACCTACAAATCTTTTGAATTTTCT
CCCCACAATGAAGAGGGCCTGAAAATCAGGAAGCAGTGTGCCCTGGCAGCCCTCCGTGACGTCCGGCGGTTCT
TAGTGAGGAGGGGGACATGTGGCGTTTGTGATGCCAAACACCCAGAGACCGGAGAGCGACCATCTTTAA
TTTTGGAGAACAGAAATGGCTACAAGACCTTTTGTGAGTCCATCTGTGTGGATCCTGAGGTCTATAGCTGCCAA
CATCGTCAAGTGAACCTGGGCAGCCCTGACTATGTCAACCGGCACAGTATGAGGACCTGGATAGGACCTGTCCTATATCAAGAT
CATGGATGTGGCCAGAGCTACGTGGTGAACCGTGTGGCTGACCACATCCAGAGCCGATCATGTATATTACCTCAT
GAACATCCACGTGACCCCCGCTCCATCTACCTCTGCCGGCACGGGAGAGCGAGCTCAACCTCAAGGGCCGAT
TGGCGGGGACCCAGGACTGTCCCCTCGGGCAGGGAGTTTGCCAAAGTCTTAGCCAGTTTATCAGTGACCAAAA
TATCAAGGATCTGAAGGTCTGGACAAGCCAGATGAAGAGGACAATCCAGACGGCTGAGGCACCTGGGTGTGCCCTA
TGAACAGTGGGAAGTCTCAACGAGATCGATGCCGGCGTCTGTGAGGAATGACCTACGAGGAAATCAGGATAA
TTATCCACTGGAGTTTCGCCCTGCGGGACCAAGCAAGTACCGGTACCGGTACCTAAAGGGGAGTCTACGAGGA
CCTGGTCCAGAGACTGGAGCCTGTCTATCATGGAGCTGGAGAGGCAAGAGAATGTGTGGTCACTGCGCAACAGGC
TGTGATGCGCTGCTGTGGCTACTTCTCGACAAGGCAGCAGAACAGCTGCCCTACCTCAAGTGTGCCCTGCA
CACAGTCTGAAGTGTACTCTGTGGCATATGGTTGTAAGTGGAGTCCATATTCTGAAAGTGGCTGTGTGAA
CAGCGACCCGGGACAGGCCTCAGAACGTGGACATCTCAAGACCTCCAGAGGAAGCCCTGTGCAGGTGCTGCTCA
CCAGTGACCATGTTCATCCACTGTGACCACTAGGCAGGCACTGCTCTGTCAGAGGGGGCTATTCCAGGCCCTCC
AGTGTGTGTGATAGTCACCATGCCATGCAGGATATCTTGAAGCCACACATGAGGCTGGCGGCAACCCAGAGCCCC
ACCCAGCCCCACCTGGCTCTTTGTGACAGTCGGCGACAAGTTGTGCGTGGCTCCTGACCTGCTGCTAAGAGTC
ACTTGACAGACTGCATCTGCATGGGCTGCGCGGAGTTGCCAGCCCCAGTTTCTTCCGGCGCAGCTCTTAGGT
GTTCTACTGTGGCCAGCTGCCAGCATGGACCTGGTGACTCTCCACAGGGCTCTACCATCTCTCTGTGGCC
ACTTCTTGAGCCAGAGGCCAGGTCTTCATGGGGCTTGAGCTTCTGCTGCTGAGAGGGAGAGCCCTTCC
CATCTTTACCCACCAGGAAGTGAAGCCCCAACACAGCAGATGCTTCTGGGACGCACTGGCCAGGCCGTTGTA
TCCATGTCAACCTTAGTTGTGGGCATTCATGAAGCAATGCGCTTGCTTCAGCACATTTGGGATGCACAGAAAGT
GAGGGCAGGGGGCAGTTGGTGTGCGCCCTCCCAAGTTGTGATGTACCCGGCTACTTAGGTATGCTTAGGGAG
CTGTGGCCAGGGGTGCCCTTCAGGCCGTCTCAGATGAACCACTTCAAGACAGGGCAGGAAGTTACCTTC
CTGGTGACACACCAAGTGTCTGAGGAGAGGCTGCGGCCCTCTCCCTCTCCTGGCTGTGGACATGGCAG
CCAATGGGAGCGGCCCTCCCTCTGTGCTGCCGTGTCACACAGGAATGTACTGTTGCGCAGAAATCATGA

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FIGURE 1137

AGCAATGGCTGCCATCCGGAAGAACTGGTGATTGTTGGTGATGGAGCCTGTGGAAGACATGCTTGCTCATAGT
CTTCAGCAAGGACCAGTTCCAGAGGTGTATGTGCCACAGTGTTTGAGAACTATGTGGCAGATATCGAGGTGGA
TGGAAAGCAGGTAGAGTTGGCTTTGTGGGACACAGCTGGGCAGGAAGATTATGATCGCCTGAGGCCCTCTCCTA
CCCAGATACCGATGTTTACTGTATGTGTTTTCCATCGACAGCCCTGATAGTTTAAAAACATCCCAGAAAAGTG
GACCCCAAGTCAAGCATTTCTGTCCCAACGTGCCCATCATCTTGTTGGGAATAAGAAGGATCTTCGGAATGA
TGAGCACACAAGGCGGGAGCTAGCCAGATGAAGCAGGAGCCGGTGAAACCTGAAGAAGGCAGAGATATGGCAA
CAGGATTGGCGCTTTTGGGTACATGGAGTGTTACGCAAGACCAGAAAGATGGAGTGAGAGAGGTTTTGAAATGGC
TACGAGAGCTGCTTCGCAAGCTAGACGTGGGAAGAAAAATCTGGGTGCCCTTGCTCTGTGAACCTTGCTGCAAG
CACAGCCCTTATGCGTTAATTTGAAGTGCTGTTTATTAATCTTAGTGATGATTACTGGCCCTTTTCATTAT
CTATAATTTACCTAAGATTACAATCAGAAGTCATCTTGCTACCAAGTATTAGAAGCCAATATGATTATTAACG
ATGTCCAACCGTCTGGCCCACCAGGGTCCTTTTGACACTGCTCTAACAGCCCTCCTCTGCACTCCACCTGACA
CACCAGGCGCTAATTCAAGGAATTTCTTAACCTCTTGCTTCTTTCTAGAAAGAGAAACAGTTGGTAACCTTTTG
AATTAGGCTGTAATACTACTTTATAACTAACATGTCCTGCCATTATCTGTGCACTGCAAGGTACTCTGGTGAGTCA
CCACTTCAGGGCTTTACTCCGTAAACAGATTTTGTTGGCATAGCTCTGGGGTGGGCAGTTTTTTGAAAATGGGCTC
AACCAGAAAAGCCCAAGTTCATGCAGCTGTGGCAGAGTTACAGTTCTGTGGTTTCATGTTAGTTACCTTATAGTT
ACTGTGAATTAGTGCCACTTAATGTATGTTACCAAAATAAATATATCTACCCAGACTAGATGTAGTATTTTT
TGTATAATTGGATTTTCTAATACTGTCATCTCAAAGAAAGTGATTGGTTTTTAAAAAGAAAGTGATTG
AAATAAAGTCAGATGGAATTCATTTTTAAATCCCGTTTTGTCATTTTTCTGATAAAAGATGGCCATATTA
CCCCTTTTCGGCCCCATGTATCTCAGTACCCCATGGAGCTGGGCTAAGTAAATAGGAATTGGTTTCACGCTGAG
GCAATTAGACACTTTGGAAGATGGCATAACCTGTCTCACCTGGACTTAAGCATCTGGCTCTAATTCACAGTGCTC
TTTTCTCTCTCACTGTATCCAGGTTCCCTCCCAGAGGAGCCACCAAGTTCTCATGGGTGGCACTCAGTCTCTCTCT
CTCCAGCTGACTAAACTTTTTTCTGTACCAGTTAATTTTTCCAACCTACTAATAGAATAAAGGCAGTTTCT

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FIGURE 1138

MAAIRKKLVIVGDGACGKTCLLIVFSKDQFPEVYVPTVFENYVADIEVDGKQVELALWDTAGQEDYDRLRPLSYP
DTDVILMCFSIDSPDSLENIPEKWTPEVKHFCPNVPIILVGNKKDLRNDHTRRELAKMKQEPVKPEGRDMANR
IGAFGYMECSAKTKDGVREVFEMATRAALQARRGKKKSGCLVL

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FIGURE 1139

TGAGCCCCAGCTAAGCGCTGCCCTTGAGTATGTGCGGAGTCACCCCTTGGACCCCATCGACACTGTGGACTTCGA
GCGGGAATGTGGCGTGGGTGTCAATTGTGACCCAGAGCAGATTGAGGAGGCTGTGGAGGCTGCTATTAACAGGCA
CCGGCCCCAGCTCCTGGTGAACGTTACCATTCAACATGGGGCTGCTGATGGGAGAGGCTCGGGCTGTGCTGAA
GTGGGCAGATGGCAAATGATCAAGAATGAAGTGGACATCGAGGTCTCCACCTTCTGGGCCCAAAGTTGGAGGC
TGATCTGGAGAAGAAATTCAAGGTGGCAAAAGCTCGGCTAGAAGAAACAGACCGGAGGACGGCAAAAGGATGTGGT
GGAGAATGGCGAGACTGCTGACCAGACCTGTCTCTGATGGAGCAGCTCCGGGGGGAGGCCCTTAAGTCCACAA
GCCTGGTGAGAACTACAAGACCCAGGCTATGTGGTCACTCCACACACCATGAATCTACTAAAGCAGCACCTGGA
GATTACTGGTGGCGAGGTACGTACCCGGTTCCCGCCAGAACCAATGGAATCCTGCATATTGGACATGCCAAAGC
CATCAATTTCAACTTTGGCTATGCCAAGGCCAACAAATGGCATCTGTTTTCTGCGTTTTGATGACACCAACCTGA
GAAGGAGGAAGCAAAATTCTTCACGGCCATCTGTGACATGGTAGCCTGGCTAGGCTACACACCTTACAAAGTCAC
ATATGCGTCTGACTATTTTGACCAGCTATATGCGTGGGCTGTGGAGCTCATCCGCAGGGGTCTGGCTTATGTGTG
CCACCAGCGAGGAGAGGAGCTCAAAGGCCATAATACTCTGCCTTCACCTGGAGAGACCGTCCCATGGAGGAGTC
ACTGCTGCTCTTTGAGGCAATGCGCAAGGGCAAGTTTTCAGAGGGCGAGGCCACACTACGAGATGAAGCTGGTGAT
GGAGGATGGCAAGATGGACCTGTAGCCTATCGAGTCAAGTATACACCACACCACCGCACAGGGGACAAATGGTG
CATCTATCCACCTACGACTACACACACTGCCTCTGTGACTCCATCGAGCACATCACTCACTCACTCTGCACCAA
GGAATTCAGGCCCC

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[illegible]

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FIGURE 1140B

GCCAGAGGCCCCACCTGCAACGAGTTACAGGGCAGTGCACCTGCCGTGCCGGCTTTGGAGGGCGGACTTGTTC
GAGTGCCAAAGAGCTCCACTGGGGAGACCTTGGGTGTCAGTGCATGCCCTGTGATTGTGACTCTCGTGGAAATAGAT
ACACCTCAGTGTACCGCTTACAGGTCACTGCAGCTGCCGCCAGGGGTGTCTGGTGTGCGCTGTGACCACTGT
GCCCGTGGCTTCTCAGGAATCTTTCTGCGCTGCCATCCCTGCCATGCATGCTTCGGGGATTGGACCCGAGTGGTG
CAGGACTTGGCAGCCCGTACACAGCCGCTAGAGCAGCGGGCGCAGGAGTTGCAACAGACGGGTGTGCTGGGTGCC
TTTGAGAGCAGCTTCTGGCACAATCAGAGAGAAGCTGGGCATTGTGCAGGGCATCTGAGTGGCCGCAACACCTCA
GCCGCTCCACTGCACAGCTTGTGGAGGCCACAGAGGAGCTGCGGCGTGAATTTGGGAGGCCACTGAGCACCTG
ACTCAGCTCGAGGCAGACCTGACAGATGTGCAAGATGAGAACTTCAATGCCAACCATGCCTAAGTGGTCTGGAG
CGAGATAGGCTTGCACTTAATCTCACACTGCGGCAGCTCGACCAGCATCTTGACTTGTCTCAAACTTCAAACCTC
CTGGGTGCCATAGACAGCATCCGGCATGCCCATAGCCAGTCTGCAGAGGCAGAACGTCGTGCCAATACCTCAGCC
CTGGCAGTACCTAGCCCTGTGAGCAACTCGGCAAGTGTCTGGCATCGGACAGAGGCCTGATGGATGCTCAGAAG
GAGGACTTCAACAGCAAAACACATGGCCAACAGCGGGCACTTGGCAAGCTCTCTGCCCATACCCACACCTGAGC
CTGACAGACATAAATGAGCTGGTGTGTGGGGCACCAGGGGATGCACCTGTGCTACAAGCCCTTGTGGGGGTGCC
GGCTGTGAGATGAGGATGGGCAGCCCGCTGTGGGGCTCAGCTGCAATGGGGCAGCGGCTACAGCAGACCTA
GCACCTGGGGCCGGGCCACACAGGCAGAGCTGCACGGGGCACTGGCAAGAGGTGGTAGCATCTTCAGCAGA
GTGGCTGAGACTCTGCTGGCAGGCAAGCAGGGCAGCAGCGGGCCAGGCAGCCCTGGACAAGGCTAATGCTTCC
AGGGGACAGGTGGAACAGGCCAACACAGGAACCTTCAAGAACTTATCCAGAGTGTGAAGGACTTCTCTCAACAGGAG
GGGGCTGATCCTGATAGCATTGAAATGGTGGCCACACGGGTGCTAGAGCTCTCCATCCCAGCTTCAGCTGAGCAG
ATCCAGCACCTGGCGGGTGCATTGCAGAGCGAGTCCGGAGCCTGGCAGATGTGGATGCGATCTGGCACGTACT
GTAGAGATGTGCGTCTGTGCCGAGCAGCTACTGCAGGATGCACGGCGGGCAAGGAGCTGGGCTGAGGATGAGAAA
CAGAAGGCAGAGACAGTACAGGCAGCACTGGAGGAGGCCACGGGCACAGGATTTGCCAGGGTGGCATCCGG
GGGCGAGTGGCTGACACACGGGACACAGAGCAGACCTGTACAGGTACAGGAGAGATGCGAGGTGCAGAGCGG
GCACAGCTCTGCAGGTGAAGGGCTCGGCAGTTGGATGCTCTCCTGGAGGCTCTGAAATTTGAAACGGGCAGGA
AATAGTCTGGCAGCTCTACAGCAGAGAAACGGCAGGCAGTGGCCAGGGTCTGTCGCCAGGAGGCTGAGCAGCTG
CTACGCGTCTCTGGGTGATCAGTACCAGACGGTGAAGGCCCTAGCTGAGCGCAAGGCCCAAGGTGTGCTGGCT
GCACAGGCAAGGCGAGAACAACTGCGGGATGAGGCTCGGGACCTGTTGCAAGCCCTCAGGACAAGCTGCACGGG
CTACAGGAATTGGAAGGCACCTATGAGGAAAAATGAGCGGCAGTGGAGAGTAAGGCAGCCAGTTGGACGGGTG
GAGGCCAGGATCGCAGCGTGTCTCAAGCCATCAACTTGCAGGTGCAGATCTACAACACCTGCCAGTGACCCCTG
CCCAAGGCTTACCCAGTTCTCTAGCACTGCCCCACATGCATGTCTGCCATGCAGTGAAGAGCTCTTGGCCCGC
AGGGCCCCCAATAAACCAAGTGTGAACCCC

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FIGURE 1141

AGGGCCGGGAGCCCCGCCAGAGCCCGACTTCAGCCCCAGCCAGATCCCGCGTCAACGGAGGCGGAACGGCGGACC
CCGTACCCCTGCAGCATCGGAGCACCCGGCGGGTGAAGGCAAGGTCCCTGGACTGGTCATATACCTCTTGTGGCCC
TGGCAGAATCAAGATGAGGCCCTGTATGCTCCCACTGAGGCCCTACAGTCTGAGCAGACAGCATGGCCTGCCA
CTGGCAGTGAACACCATGTCTGCAGAGGTGGCCGGGCCITTGCTTGGCAAGTGTCCCCCCATGCCACTTGC
CGGGTCTATGGCAGATGGCACACCAAGATGGGCACCTGCTGGTTGGGGGGTTGTGGCCGGGCTGGACTGCC
CTGGACACTGCTGAGACACTGGACATGGCCTCGCACACATGGCTGGCACTGGCACCCCTGCCACTGCCCGGGT
GGTGCAGCTGCGGTAGTTCTGGGCAAGCAGGTGCTAGTGGTGGTGGTGTGGATGAGGTCCAGAGCCCGGTAGCT
GCTGTAGAGGCCTTCTGATGGATGAGGGCCGCTGGGAGCGTCGGGCCACCCTCCCTCAAGCAGCCATGGGGGT
GCAACTGTGGAGAGATGGTATGGTGTATGCTCTGGGGGGAATGGCCCTGACACGGCCCCCAGGCCAGGTA
CGTGTGTATGACCCCGCTGGGACTGCTGGCTTTCGCTACCTCCATGCCACACCCCTGCTATGGGGCTCCACC
TTCTTGACAGGGAAACAAGATCTATGCTCTGGGGGGCCGCCAGGGCAAGCTCCCGGTGACTGCTTTGAAGCCTT
GATCTGGAGGCCCGTACATGGACCCGGCATCCAAGCCTACCCAGCCGTGCGGCCCTTGTGTGCTGCGCCATGGCT
GAAGGCAGCGTCTTTAGCCTGGGTGGCCTGCAGCAGCCTGGGCCCCACAACCTTCTACTCTCGCCACACTTTGTC
AACACTGTGGAGATGTTTGACCTGGAGCATGGGTCTTGGACCAATTGCCCGCAGCCTGCGCATGAGGGATAAG
AGGGCAGACTTTGTGGTTGGGTCCCTTGGGGGCCACATTGTGGCCATTGGGGGCCCTTGGAAACCAAGCCATGTCCT
TTGGGCTCTGTGAGAGCTTTAGCCTTGACGGCGGCGCTGGGAGGCATTGCTGCCATGCCACTGCCCGCTGC
TCCTGCTCTAGTCTGCAGGCTGGGCCCGGCTGTTTGTATTGGGGGTGTGGCCAGGGCCCCAGTCAAGCCGTG
GAGGCACCTGTGCTGCTGATGGGGTCTGAAGGCTTGGTGGGAGCTGTCCACTGGAGCAGCTCATTGCCAGAGGC
AGCTATTTCTATGGCTCCTTTTGTCTGCTGAGGACACTCACTGTGGCTCTGTGGATGAGAGAGGCATGGGGGTGA
GCACCTTGAACACTGCCTTGGGGCTTGGGTAGGGAGCCTTGTCTTTAGTGCAGGACACACATATGCTTACA
CCTACCTTTATCACCATTGCTTCAATGATCATGCTCCTCCTTGCCTTGGGACCTACTAGGCCTTCCATC
CAACTGGGAAAATGGGGAGAAGCAAGCTGGCCTCATGCTCTTCAGGGTCAGTTCCTATCTGGAGTTGACCAGGCC
TACCCAGTTGCCATTCTGAAAAATCTCAGCTGCCAGGCTGCCTTAGGGTCCCTGCAGACCCAGGAGAGTTGA
GAGGGTGGGGGACACAGAGAGAATAGAGAGGATGTGGAACTGCCAGAGGGCCGAGCGCAGGAGTTCAAGTGA
GGAATGCTGGCTTTGAGCCCTCTACACTGCTGGTGTATGACCTTGGACAAGTCACTTCACCTCTCTGTGCCTCA
GCATCCTCATCTATAAATGGGATCTCTGAAACCTTCCCTACCTACCTCACAGGGCTGTTGTGAGGACCCA
GGGAGTTGGATGTGGAAGTAAAGTGCTGCTAAAACCTA

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FIGURE 1142

MSAGGGRAFAWQVFPMPPTCRVYGTVAHQDGHLLVLGGCGRAGLPLDTAETLDMASHTWLALAPLPTARAGAAV
VLGKQVLVVGVDDEVQSPVAAVEAFLMDEGRWERRATLPQAAMGVATVERDGMVYALGGMGPD TAPQAQVRVYDP
RRDCWLSLPSMPTFCYGASTFLHGNKIYVLGGRQGKLPVTAFEAFDLEARTWIRHPSLPSRRAFAGCAMAEGSVF
SLGGLQQPGPHNFYSRPHFVNTVEMFMLEHGSWTKLPRSLMRDKRADFVVGSLGGHIVAIGGLGNQPCPLGSVE
SFSLARRRWEALPAMPTARCSCSSLQAGPRLFVIGGVAQGPSQAVEALCLRDGV

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FIGURE 1143

GGCGGCAGAGAGGAGACTATCGAACGTCAAGTCTGCTGAGCGAGCCGAGGAGCGCGGCTCTGTATCGGGG
CTTAGCCGCGCAGCCCGCGCTGAGCGCCGCGCTGCTGGGCGCCGAGGTCACCACGAGTACGGCGGCGCAATACCGG
ACGGTGCACACTGAGTGGACCCAGAGGGACCTGGAACGCATGGAGAACATTTCGATTCTGCCGCCAATACCTGGTG
TTCCATGACGGGGACTCAGTGGTGTTTGACGACCTGCAGGCCAACAGTGTGGAGACCCGGGGGAACCTGCTGAGC
AGAGAGTCTCCTTCAGGCACCATGAAGCTGTGCTGCGCAAGGCTGGAGGCACGGGCCCTGGGGAAGAGAAGCAG
TTCCTGGAGGTCTGGGAGAAGAACCAGGAGCTCAAGAGCTTCAACCTGTCAAGCTGGAGAAACATGGGCGTGT
TATGAGGATGACTGCTTTGGCTGCCTGTCTGGTGCAGCTCGGAGACACACTTGTGTATGTGGCAGAGAAGAA
CGCCCCAAGGCCGAGTCTCTTCTCAGACCAGCCTTGGACGTCACTGCCAGCGATGATGAGATAGCCAGGCTG
AAGAAGCCAGACCAAGCCATCAAGGGGGATCAGTTTGTGTTTTATGAAGACTGGGGAGAAAACATGGTTTCCAAA
AGCATCCCTGTGCTCTGCGTGTGGATGTCGAGAGTGGCAACATCTCTGTCTTGAGGGGGTCCCTGAGAATGTG
TCCCTGGACAGGCATTTTGGGCCCTGGAGATGCTGGTGTGGTGTGTTGGGCTGGTGGCATGAGCCCTTCGG
TTGGGCATCCGCTTTTGACCAATCGCAGGTCAAGCCCTGTATTATGTGGACCTCATCGGGGGAGAGTGTGAGCTC
CTCTCGGATGACTCCCTGGCTGTCTTCTCTCCCGGCTGAGCCAGACCAATGTCGCAATTGTCTACCTGCAGTAC
CCATCTCTGATCCCCATCACCAGTCAAGCCAGCTGTGCTGTATGACTGGTATACCAAGGTTACCTCAGTGGTG
GTAGATGTTGTGCTCGGCAGCTGGGAGAGAACTTCTCTGGGATCTACTGCAGCCTTCTGCCTTTGGGATGCTGG
TCAGCTGACAGCCAGAGAGTGGTCTTTGACTCGGCTCAGCGCAGCCGGCAGGACCTGTTTGTCTGGACACCCAA
GTGGGCACTGTGACCTCCCTCACAGCTGGAGGCTCAGGTGGGAGCTGGAAGTTGCTCACAATTGACCAGGACCTC
ATGGTGGCAGACTTTTCCACCCAGCCTACCTCCAACCTGAAAGTTGGGTTCTGCTTCTTCGAGGGAAGGAG
CAGTCAGTGTGTTGGGTGCTCTGGAGGAGGCCGAGCCATTCCCGACATCCACTGGGGCATCCGGGTGCTACAG
CCACCCCCAGAGCAAGAGAATGTGAGTATGCTGGCCTTGACTTTGAAGCAATCCTGCTGCAGCCTGGCAGCCCT
CCAGATAAGACCCAAAGTCCCATGGTGGTCAATGCCCCAGGGGCCCCATTTCATCCTTTGCACTGCCTGGATG
CTGTTCCCGCATGCTTTGCAAGATGGGCTTTGCGGTACTACTAGTGAACATATCGTGGCTCCACGGGCTTTGGC
CAGGACAGCATCCTCTCCCTCCAGGCATGTGGGCCACCAAGGATGTGAAGATGTCCAGTTTGAGTGGAAAC
GTGCTCCAGGAGGAACACTTTGATGCAAGCCATGTGGCCCTTATGGTGGTCCCATGGTGGCTTCATTTCTGCT
CACTTGATTGGTCAGTACCCAGAGACCTACAGGGCCTGCGTGGCCCGGAACCCCGTGATCAACATCGCCTCCATG
TTGGGCTCCAATGACATCCCTGACTGTGTGCTGGTGGAGGCTGGCTTTCCTTTCAGCAGTGACTGCTGCTGCCAGAC
CTCAGCGTGTGGGCTGAGATGCTGGACAAATCGCCCATCAGATACATCCCTCAGGTGAAGACACCACTGTACTG
ATGTTGGGCGCAGGAGGACCGGCGTGTGCCCTTCAAGCAGGGCATGGAGTATTACCGTGCCTCAAGACCCGGAAT
GTGCGCTTTCGGCTCTGCTCTATCCCAAAGCACCCAGCATTATCAGAGGTGGAGGTGGAGTCAGACAGCTTC
ATGAATGCTGTGCTCTGGCTACGACACACTTGGGCAGCTGAGGCCCTGCCATTCTGATGAGCTGATCAGCCTG
TGCCACACTTCCGCTTTGAGGAGCTCAACGGTCTGGCAGGCGCAGGAGGCTTCTGGGCTCTGGACTCCAGG
ATGCGTGGGCAGAGGAATGGGGCTATGTAGTCATAATAAATAGGAC

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FIGURE 1144

MERQVLLSEPEEAAAALYRGLSRQPALSAACLGPEVTTQYGGQYRTVHTEWTQDRLERMENIRFCRQYLVFHDGDS
VVFAGPAGNSVETRGEALLSRESPSGTMKAVLRKAGGTGPGEKQFLEVWEKNRKLKSFNLSALEKHGPPYEDDCF
GCLSWSHSETHLLYVAEKKRPKAESFFQTKALDVSASDDEIARLKKPDQAIGDQFVFYEDWGENMVSKSIPVLC
VLDVESGNISVLEGVPEVNSPGQAFWAPGDAGVVFVGWWHEPFRLGIRFCTNRRSALYVVDLIGGKCELLSDDSL
AVSSPRLSPDQCRIVYLQYPSLIPHHQCSQLCLYDWYTKVTSVVVDVVPRLGENFSGIYCSLLPLGCWSADSQR
VVFDSAQRSRQDLFAVDTVQGTVISLTAGSGSGSWKLLTIDQDLMVAQFSTPSLPPTLKVGFLPSAGKEQSVLWV
SLEEAEP IPDIHWGIRVLQPPPEQENVQYAGLDFEAILLQPGSPDKTQVPMVMVPHGGPHSSFVTAWMLFPAML
CKMGFAVLLVNYRGSTGFCQDSILSLPGNVGHQDVQDQFAVEQVLQEEHFDASHVALMGGSHGGFISCHLIGQY
PETYRACVARNPVINIASMLGSTDIPDWCVVEAGFPFSSDCLPDLSVWAEMLDKSPIRYIPQVKTPLLLMLGQED
RRVPFKQMEYYRALKTRNVPVRLLLYPKSTHALSEVEVESDSFMNAVILWLRLTHLS

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FIGURE 1145

TACTCCCGAGTCACTCATCCCTTAAGCAAGCAGGGTGGGGTTAGGTGCGCGTGCGCGGTTTAACTACTCTCCCG
CGAACTGCCAACTCTTACGCGACGCGAAGTAGGCCCCACCCTGGCTGGGTTTACGCGTGCGCACTAACGGGCCCTG
GTCCCGGAAGACCACACGCGTGCGTGGTGGGGACTACGTTGACAGTACCCGGGTGGGCGAGGGCCAGTCAATGG
CGGAGTCTCGGTCTGGGCGAGGCTTGCAGGCTCTGCCGGCCACGGTGCTGGGCGCGCTGGGCAGCGAGTCTTTCG
GGGAGTGGGAGGCGCAGGACATGCGCGTGACCCTCTTCAAGCTGCTGCTGCTGTGGTGGTGGTAAAGTCTCCTGG
GCATCCAGCTGGCGTGGGGTTTACGGGAATACAGTGACCGGGTTGTATCACCGTCCAGGTCTGGGTGGTCAGA
ATGGATCCACGCTGATGCTCCACGCATTTCCCTTCGTGGGAAATGGCAGCAACGAACCTCTCAAAACCCACA
GAGAAATAGGGGAAGGCAGAGGGTCTCCAAGGGCATCACTGGGTCTGCTGGCTTCTACACTGGGTTCTGCTAC
TCCCCAGACCTCAGGGACAACCTGCCGGGGTTTCAAGGTTGGTAGCAGGGAGTACCCAGTGCCTACAGGGCTGGGC
CTCTTCTGCCTCTTAAGCTGCTCCCTCACCCAGGCACTGGGCAAGTGAAGAGTTTGCCTGTACTCTTATCTGGG
TGCTTAAGGAGAGAGATTGTGTTCTTCTCTCTCAGGGGTGATAACTCAGGAAGCCTCTGGGTGGGAAGACCA
TCAGTCTTTTGTCTTAGGTTCTTTTCTGTCCCTCTTCCATCCCCAAGATGTGACCCCAATAAAATTTTCTCT
GAGTTGGCCAGGCATGGTGGCTCAGCCTGTAAATCCCAACACTTTGGGAGGCTGAGGCAGGCAGATCACGAGGTC
AGGAGTTCGAGACCAGCCTGACCAACATGGTGAAAACCCCATCTCTACTAAAAATACAAAAATTAGCCGGGTGTG
GTGGCACACACAGTAATCCACGCTACTCGGAGGCTGAAGCAGGAGATTGCTTGAACCTGGGAGGCAGAGGTT
GCAGTGAGCCAGAATTGCGCCGTTGTACTCCAGCCTGGGCAACAGAGCAAGACCATCTCAAAAAAAAAAATTTT
TTCCTGAGAGGAAGCCTGAGGTTGACCACTCTGGSGTTTGAAGCAGGTCTGTTTTCTCCTTAGGCCCTGAGTT
TTCTGAATCTCTGGTTTTGCTTTGTTGGCAAGGAGCCAGGGAATCCTGACCTGAGCCAGACCTTAAGCTCTATGG
TTATTTAGCTGGCCATTCAAGTATAAGGCAGGTGGTGTACCTGCTGGCATACTCCAGATGGAGGCCACCAACAC
CCACATACCTGGCCCAACAGACTTCTCCCGTGAGCCAGGCAAGGAAATTTGTATCTGCCAACTGTCTTACTCA
TATTCCTCTCAGTCTCTTTGGGGTAAAGCTGATTACCTGAAGGACAGCTGAACCCCTGGGGTAGGCTCTATCC
ACCACTGCTTAAGTGCCTTAGGGAATGTGGGTCTGCACCTTGTCCCTCATAGGATGTTACCAAGCATTAGTGC
ACAGTGGCCCATCATAGCCTGCAGCCTCATCATTTCCCATCTGGACCTGGTACAAATGCACGTACAGGCTCAG
CTCCTCCCCACTAGCATCTTCTTACCTTCAAGAACCAGGCAGCCCTGCCATGTACAAATAGGCCAGGGAGTTT
CCAAAGATGTGGGTGGCAATGCCCTATAGAAACACCAAGTACCTGAAAGCACTGTAGCCCTGGACCTGCCTCTCT
TCCCCTGGGGCCATACTTCTGTTTCCATCTGCTGGGCCACCAAGCCTTTAGTGACCCCTGGCTACTTCTCTCTCT
GTTGGATATCATACTTCCATCTGGCTGGCTTTGCTTAAGCCATCTTTGTTGGTAGAGGGGCCCTGGAATGACGCT
GTACTGAGGATGATGTTATTCACAGCCCTGGCCACCCACTAATACTACTGCACAGAGTCAGGATCTCAGATT
CACCCAGGCTCAACTGAGGATGTGGCTTATTAACACGGAAGTGC

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FIGURE 1146

MAESWSGQALQALPATVLGALGSEFLREWEAQDMRVTILFKLLLLWLVLSLGIQLAWGFYGNVTVTGLYHRPGLGG
QNGSTPDGSTHFFPSWEMAANEPLKTHRE

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FIGURE 1147

CCCAGTGTCTCCCGCAGAGGGCTGGTGGTGGGAGCGGAGTGGGTGCGGCGGGGCCGAGCCGGGCGGTGGGCCGT
GTGGGGGCCCGGCGGCGGCCGGGCCGCGGACGGCGGCTGGCTGCACCGTGAGCGCCGAGGACAAGGCGGCGG
CCGAGCGCTCTAAGATGATCGACAAGAACCTGCGGGAGGACGGAGAGAAGGCGGCGGGAGGTGAAGTTGCTGC
TGTGTGGTGTCTGGGGAGTCAGGGAAGAGCACCATCGTCAAGCAGATGAAGATCATCCACGAGGATGGCTACTCCG
AGGAGGAATGCGGCGAGTACCGGGCGGTTGTCTACAGCAACCATCCAGTCCATCATGGCCATTGTCAAAGCCA
TGGGCAACCTGCAGATCGACTTTGCGGACCCCTCCAGAGCGGACGACGCCAGGCGAGCTATTGTCACTGTCTTGCA
CCGCGGAGGAGCAAGGCGTGCTCCCTGATGACCTGTCCGGCGTCATCCGGAGGCTCTGGGCTGACCATGGTGTGC
AGGCCTGCTTTGGCCGCTCAAGGGAATACGAGCTCAACGACTCAGCTGCCCTACTACCTGAACGACCTGGAGCGTA
TTGCACAGAGTGACTACATCCCCACACAGCAAGATGTGTACGGACCCCGCTAAAGACCACGGGGATCGTGGAGA
CACACTTCACCTTCAAGGACCTACACTTCAAGATGTTTGTATGTGGGTGGTCAGCGGCTGTAGCGGAAGAAGTGG
ACGAGGAGATGAACCGCATGCATGAGAGCATGAAGCTATTGATAGCATCTGCAACAACAAGTGGTTACAGACA
CGTCCATCATCTCTTCTCTCAACAAGAAGGACCTGTTTGGAGGAGAAGATCACACAGTCCCTTGACCATCTGCT
TCCCTGAGTACACAGGGGCCAACAATATGATGAGGCGCCAGCTACATCCAGAGTAAGTTTGGAGACCTGAATA
AGCGCAAAGACACCAAGGAGATCTACACGCACTTCACGTGCGCCACCGCACCAAGAAGTGCAGTTTCGTGTTT
ACGCGCTCACCGATGTCTATCAAGAACAACCTGAAGGACTGCGGCTCTTCTGAGGGGACGCGGGGCTGGCG
GGATGGGGCCACCGCGACTTTGTACCCCCAACCCCTGAGGAAGATGGGGCAAGAAGATCACGCTCCCCGCGCT
TTCCCCCGCGCTTTTCTCCTCTTTCTCTCTTTGTCTCAGCTCCCCCTGTCCCCCTCAGCTCCAGAGTGGGG
AGGGGTTGCCACAGGCGCTCCCTGTTTGAAGCTGCGCTTGCTTGAGATGCTGGTAATGGCCATGGTACCCCCCTC
TGGGCATCTGTTCTGGTTTTTAACCATGCTCTGTTCTGTGATGAGGGGAGGGGGGCATGCTGAGTCTCCCAA
GGCTGCGTCTGAGGGGGCCCTGCTTCTCCAGCTGGACCCCAAGCTTTGCCCAACACAGCCCTGCCCCAGCC
CAAGTCCAATGTTTACAGGGAGCCTCCTGCCCCAGTCCCCAACCCAGCCGCTCGGAGGCCCAAGGAAAAAG
CACAAGAAGCGTGAGAGCCACCATCTCTGGAACACAGTCC

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FIGURE 1148

MGCTVSAEDKAAAERSKMIDKNLREDGEKAAREVKLLLLGAGESGKSTIVKQMKIIHEDGYSEEECRQYRAVVYS
NTIQSIMAIVKAMGNLQIDFADPSRADDARQLFALSCTAEEQGVLPDDLSGVIRRLWADHGVQACFGRSREYQLN
DSAAYYLNDLERIAQSDYIPTQODVLRTRVKTGIVETHFTFKDLHFMPDVGQQRSEKKKWIHCFEGVTAIIFC
VALSAYDLVLAEDEEMNRMHESMKLFDSICNNKWFTDTSIILFLNKKDLFEKITHSPLTICFPPEYTGANKYDEA
ASYIQSKFEDLNKRKDTKEIYTHFTCATDTKNVQFVFDAVTDVIKNNLKDCGLF

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FIGURE 1149

TCGTGATTGTGGCCAGGCGGGGCCACCTCGGAGGGGAGGGTTCGGAAGTGAATGCGACCCCCAGCCTCTTTCCCTAGGGGCTGTAATCTGATCCCTGGGGACTCCCCCCTAGCCCTCCCGCCCTCGCCCTCACTGCTGACTCCTCTCCAGATCTCTGGGGCAGAGTCCAGGGAGCTCAAGGCTCTCCACACACACACCCGCTGAACCTTGAGCAGCCCTGAGCTGCTGAGATGGGGGGGGGGGCTGCCGCCGTGATCCGGGCTTGGCCCTGCTCTGGGAGTGGGGCTGGGAGTGCCGCCCCCCAGCCCCCAGCCCTTCGGCTCTCTCTCCAGAGCTCCAGGCCCTGGCATGGCTCCAGACTTTCAGCCTGGAGCGAACTCTGCTACCAAGCCCTTGTGGTGGATGAGGAGCTGGAGCGCTTTTGTGGGTGCCGAGAACCATGTGGCTCCCTCAACCTGGACAACATCAGCAAGCGGGCCAGAAGCTGGCCTGGCCGGCCCCGTGGGATGGCGAGAGGATGCAACTGGGCGAGGAAGACATTGGTACTGAGTGCATGAACCTCGTGAAGTTGCTGCATGCTACAAACCGCAACCAITTTGCTGGCCTGTGGCACGGGAGCCTTCCACCCAACTGTGCCTTTGTGGAAGTGGGCCACCGGGCAGAGAGCCCGTCTCCGGCTGGACCCAGGAAGGATAGAGGATGGCAAGGGGAAGAGTCTTATGACCCAGGGCATCGGGCTGCCCTCCGTGCTGGTGGGGAGGAGCTATACTCAGGGGTGGCAGCAGACCTCATGGGACGAGACCTTACCATCTTTGCGAGCCTAGGGCAACGTCCAAGTCTCCGAACAGAGCCACAGCACTCCCGCTGGCTCAATGAGCCCAAGTTTGTCAAGGATATTTTGGATCCCGGAGAGCGAGAACCCAGACGACGACAAAATCTACTTCTTCTTGTGAGACGGCGGTAGAGCGCGCCCGCACCTGGGACGCTGTCGCTGCCCGGTTGGCCAGATCTCCCGGAACGACGTGGCGGGCCAGCGCAGCGCTGTTCAACAAGTGGACGAGCTTCTGAAGCGCGGCTGGTGTGCTGGTGGCCGGCGTCCGAGSGGAGACCCCACTTCGATCAGCTCCAGGATGTGTTCTGTTGCTCTCGCGGGACCAACCGGACCCCGCTGCTCTATGCGCTTCTCCACGTCCAGCAGCATCTTCCAGGGCTCTGCGGTGTGCGGTGACACGATGAACAGCTGCGCCGGGCTTCTTGGGACCTTTGCACACAAGGAGGGGCCCATGCACAGTGGGTGTATACCAAGGGTGCCTGCCCTACCCCGCGGCCAGGCAATGTGCCCCAGCAAGACCTTTGGCACTTCAGTTCACCAAGGACTTCCAGACGATGTCAATCCAGTTTGGCGGGAACACCCCTCATGTACAACTCTGCTGCCCACTGGGGGGCGCCCTCTTTTCTCAAAATTTGGAGCCTTACACCTTCACTCAAATTTGCCGCGGACCGGGTTGCAGCGCTGACGGACACTATGACGTCTCTTCATTGGCACAGACGTTGGCAGGTGCTGAAAGTGATCTCGTCCCCAAGGGCAGTAGGCCACGCGCAGAGGGGCTGCTCCTGGAGGAGTGCACGTGTTTGAGGACTCGGCCGCTGTCAACAGCATGCAAAATTTCTTCCAAGAGGCACAGCTGTACGTAGCTCGCGGAGCGCGGTGGCCAGATCGCGTTGCACCGCTCGCTGCCACGCGCGCTGTGCACCGAATGCTGTCTGGCGGTGACCCCTACTGCGCTGGGACGGGGTGCCTGTCACGCGCTTCCAGCCAGTGCCAAAGAGCGGTTCCGGCGGCAAGACGTAAAGAAATGGCGACCCAGCAAGTGTGCTCTCGAGAGACTGCTCTGTCGCCGCTGTGGAAACACAAGGTGTTCCGGCTGGAGGGCAGCAGCGCTTTCTGGAGTGTGAGCCCCGCTCGCTGCAGGCGCGCGTGGAGTGGACTTTCAGCGCGCAGGGGTGACAGCCACACCCAGGTGCTGGCAGAGGAGCGCACGAGCGCACCGCCCGGGGACTACTGCTGCGCAGGCTGCGGCGCGGGACTCGGGCGTGTACTGTGTGCGCGCGCTGAGCAGGGCTTACGCAAAACCGCTGCGTGCCTGTGCTGCACTGTTGAGTGTACGAGGGCGAAGCACTGGCGGGCGGAGGAGGTGCGCCCGCGCGCCCGGCCCAAACCTCTGGTACCGGGACTTTCTGCAGTCTGGTGAACCGCGGAGGTTGGCAGCGCGAACTCCCTGCGCATGTGCGCGCGCAGCTGCGCTGAGCTGCTGCCCTGGA

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FIGURE 1150

MGRAGAAAVIPGLALLWAVGLGSAAPSPPRRLRSLFQELQAWHGLQTFSLERTCCYQALLVDEERGLFVGAENHV
ASLNLNDNISKRACKLAWPAPVEWREECNWAGKDIGTECMNFVKLLHAYNRTHLLACGTGAFHP TCAFVEVGHRAE
EPVLRLDPGRIEDGKGKSPYDPRHRAASVLVGEELYSGVAADLMGRDFTIFRSLGQRFSLRTEPHDSRWLNPKF
VKVFWIPESENPDDDKIYFFRETAVEAAPALGRLSVSRVGGQICRNDVGGQSRSLVNKWTTF LKARLVC SVPGVEG
DTHFDQLQDVFLSSRDHRTPLLYAVFSTSSSIFQGSACVYSMNDRRAFLGPPFAHKEGPMHQWVS YQGRVPYP
RPGMCPSKTFTGTFSSTKDFDDVIQFARNHPLMYNSVLPTGGRPLFLQVGANYTFTQIAADRVAADGHYDVLFI
GTDVGTVLKVISVPKGRPSAEGLLLEELHVFEDSAAVTSMQISSKRHQLYVASRSAVAQIALHRCAAHGRVCTE
CCLARDPYCAWDGVACTRFQPSAKRRFRQDVRNGDPSTLCSGDSRRPALLEHKVPFGEVSSAFLECEPRSLQAR
VEWTFQRAGVTAHTQVLAERTERTARGLLLRRLRRRDSGVYLCAAVEQGFTQPLRRLSLHVL SATQAERLARAE
EAAAPAPPGPKLWYRDFLQLVEPGGGGSANSLRMC RPQPALQSLPLESRRKGRNRRTHAPEPRAERGPSATHW

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FIGURE 1151

ATGGGCCCCAAAAATCTTGGCGAAGTCACTTTTTTCCACTGCCTGAGGTTTGGCTGTGCTCCTGTTATCCCAA
GCTCTAAGCCCTTCCCATGGTCCCCAGACCCAGGCAGGGGTAGGTCTCGTCTGGAGTGTCCCGCTGCCAAGTGCC
CTGAGAAGCCAGTCTTGCTTGGTCTCCACTGAGGCAGCGTTCGGAGTTAACACCCTGCGACTTTGTTCCCGACG
CGGGGCTGGGGCGCGCGCAGGGCATTGTGGGTGCATAGTTACGCCAGCGCGICGTCGGCTGTAGCCGCGCTGCG
CTGCGCGCTCAGGCCCTCTGGGATTAGTAGTTTTAGCCTCGTGGATGGCGGGGCGCCTCGCGAAGATGGTGGCGCG
CGTGGCGTGTGGCTCCGTCGTCTGGCCAAGTCTCAGCGCAGCGCACCGCCGCGCGTCTCGTTGGCTGGAGCCCC
ACACCCACCGGGTCCCTGACCCGCGCCCCCGCGCCCGGTTCCCGGCATGCCTCGCGCCCGTAAGGGCAACACG
CTCCGGAAGGGTGGTCAGCGCCGTGAGGAGGTGCCCGAGCAGTGCCCAAGCTGACTCGGGTTCAGTGACGAT
GAGGCAGCCAGTGAGGCCCCGACGACCCGCCAGTGAATGCCCCAGCCTTCTCAGCACCACTGCAGAGGACAGCCTT
GGGGGGGATGCTGTGGATGAGCAGGGCCAGCAGGAAGACCTTGAGGAAAAGCTGAAGGAGTATGTGGACTGTCTC
ACAGACAAAGATGCCAAGACCCGCGAGGGTGCTCTTGAGAGCCTGCGCCTGGCCCTAGCGTCCCAGCTACTCCCC
GACTTCTTGCTGGAGCGCCGCTCAGCTAGCCGATGCCCTGGAAAAGTGCTCAAAGAAAGGGAAGGGCGAGGAA
CAAGCCCTGGCTGCTGCTGTGCTAGGCCGTGCTCTGCGTGCAGCTGGGCCCTGGACCTAAGGGTGAGGAGCTGTTT
CACAGCTCGCAGCCTCTGCTGGTCTCTGTGCTCAGTGACAGCACAGCTAGCCCTGCTGCCCGGCTCCACTGTGCT
TCTGCCCTTGGCTGGGCTGCTACGTGGCTGCCGCTGACATCCAGGACCTGGTCTCTTGCCCTTGCCCTGCTTAGAA
AGTGTTTTTCAGCCGGTTCTAIGGCTTGGGGGCGAGCTCCACAAAGTCTGTGGTTCCTGCCAGCCTGCACGGCCTG
CTCTGCTGCTGCCCTGCAGGCTGGGCTGCTGCTCACCATCTGCCCTAGCACCCAAATCAGCCACATCCTTGAC
AGGCAGCTGCCCCGGCTGCCCGAGCTCTTGTCAGTGAAAGTGTGAACCTGCGGATCGCTGCCGGTGAAACCAAT
GCACTGCTCTTTAGACTTGGCCGGGACCTTGAGGAGGAGTTTGTTTACGAGGACATGGAGGCCCTCTGCAGTGTCT
CTGCGCACTCTGGCCACTGACAGTAACAAGTACCGTGCCAAAGGCTGATCGTGGCGGCCAGCGCTCTACTTTCCCG
GCCGTGCTGCACTCCGTGGAGGCGGTGAATGCGAAGAAGAGATAGTGCCTTCGGCTTTGAGGTGCTCTACATG
GACAGCTGGGCTCGGCACCGGATCTACGCTGCCCTCAAGGAAGTGTGCTGGGTTCGGGATGCACCACCACCTCCAG
AACAAATGAGCTACTCCGTGACATCTTTGGCCTGGGCCCTGTGCTGTTGCTGGATGCCACTGCCCTGAAGGCCGTGC
AAGGTTCCACGCTTTGAGAAGCACCTGTACAAATGCTGCTGCCCTCAAAGCCCGGACCAAGGCTCGAAGCCGTGTG
CGGGACAAGCGGGCAGACATCCTGTGAAGCAGGACCTGCTGAAAGGAGAGCTTTCTATGCCCTTGGTCCGTATTT
TTAACAAGAAGACAGTGCAACAACTGGTCTCCACCAGTATTTGTCACTTTATTTTTTTAATGACAAAAACAAAAA
CAGACATGGGGTGGGTAGCTGGGGGCCGGACACTTGGGACCCTGACCCCTTTTGCTCTGCCTCAGCCCTGTGG
CCCCTTCTGCTCTGCTCAGGCCAGGCTAAATATGTGCTTCTCAGGGCTGTGGGGCAGGCCTAGGGGGCCT
TTCCTTCTCTTCTTCTCAGGCCCTGCTCCCCAGGATGACCCACTCTTAGGGGGGTGGTGGCATCTGGACAA
ATGCCACCACAGCAGGTGGGGTGGCAAAGCTACCTGGAATGGATTGTGTGCTGATTTTAAGGATTATTACAGA
TAATTAACAGAACGGTCAGCCTTCAAAAAAAAAAAAAAAAAAATTCCTGCGGCCGCAAGGC

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FIGURE 1152

MGPKKSWRSHFFPLPEVWLLLLLSQALSPSHGPQTQAGVGLVWSVPLPSALRSQSCLGAPLRDASELTTVHLFPT
RGWGARRALWVHSSASASSAASRRRLRAQASGISFSFSLVDGGAPREDGGARGVWLPSSGQVSAQRTGRRLVGLEP
TPTGSLTPRPFRPVPGMPRARKGNTLRKGGQRRGGGARSSAQADSGSSDDEAASEARSTASECPSSLSTTAEDSL
GGDVVDEQGGQEDLEEKLKEYVDCLTDKSAKTRQGALESRLALASRLLPDFLERRRLTADALEKCLKKGKGEE
QALAAAVLGLLCVQLGPGPKGEELFHSLLQPLLVSVLSDSTASPAARLHCASALGLGCYVAAADIQDLVSCCLACLE
SVFSRFYGLGSSSTSPVVPASLHGLLSAALQAWALLTICPSTQISHILDRQLPRLPQLLSSESVNLRIAAGETI
ALLFELARDLEEFEVYEDMEALCSVLRTLATDSNKYRAKADRRRQRSTFRAVLHSEVGGECEEEIVRFGFEVLYM
DSWARHRIYAAFKEVLGSGMHHLQNNELLRDIFGLGPVLLDATALKACKVPRFEKHLYNAAAFKARTKARSRV
RDKRADIL

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FIGURE 1153

TGCGGCCGCGTTTCCGTGGAGACAGCCGAGCCTGCGGAAGCGGCGGCGGCGGCACCTGCGATCAGCGGCTGGGG
CAGGTTATGTTAGTGCAGACTGCGGTGTGAGCAGAGCGGCCACGGGCCCCGCATGCGCCGGCGGCCCTGACATG

GGCGCCAGCGGGTCCAAAGCTCGGGGCCCTGTGGCCCTTCGCCTCGCGGCGCGGAGGCGGCGGCTCAGAGGCAGCA
GGAGCTGAGCAAGCTTTGGTGCGGCCCTCGGGGCCGAGCTGTGCCCCCTTCGTATTACGCGCCGCGGCTCTATG
TTCATATGATGAGGATGGGATCTGGCTCACGAGTTCATGAGGAGACAATCGTCACCAAGAACGGGCAGAAAGCGG
GCCAAGCTGAGGCGAGTGCATAAGAAATCTGATTCTCAGGGCATCGTGAAGCTGGATCACCCCCGCATCCACGTG
GATTTCCCTGTGATCCTCTATGAGGTGTCACCTGGGAGGTGGCAGACAGAAACCCCTGCCCGGCAAGAAA
CTCCCAGGCTCAATCAAGGTGTGGCTTCCATTGAGGAGCCAGGCTGGGGCCACAACCTGAATAAACTCTGTTG
GCCCATAACTTCAGCTGTGAGCGGGTCGGTCCACAGTATTGGTTGGGTGTTGGTTTGTGTGTGGACAAGAGST
GGGCATATACCACTCAGGAATGCCGTTACCTGGTTCCTTGCCTGGTCTGCTTTCTTCCAAAGTTTGCCTGGGGCC
TAGCCCTGCTAGAGGCTACAGCACTTTACAAGCAAGGTATGCTTCTTCCAGCCCTAGGCTGTGGGCACTGTAT
ACAAGTAGGAACTTCCCTTCCCTTCACTTCCCTTTTAAACCCCTAGTCAGAGCATTTCAGCCGTTTGCTACCTCGAT
TCCCTCTGTGTTGGACAGAGGCTGGGGGCAGTGCCAGCCTGATTCTTCCGACCTACCTGCCATTGTTCCCGCCT
TCAGATGGATGGACAGTTTGTCTGGCTATTGATAGGAGTGGGGACTGGGTGGGGGCTTCTCCCTCAACCCAGGGCT
GGGCTGATCCCCCTACTGCAACTAACTGTTGCCCCCAACCCCGAACCCCACTTCTGTCTAATCTCC
GCTGGGGTCAGGACAGGCTGCGGATGCTTGTGCCTATGGGGAGTTACTCCAACCCACCTATCTGTCTAATCTCC
ATGGCTTTGCACCAATCTCCACCCCTCCAATTGGGAGGGGACTGTTCAACACCTTGTGGTAAGGGACAACACC
CTAAGGGATGGTCCAGTAGTTATGAGTAGCCTACACCCCTCCCTTACAGTAACCCCAACCCCTTCAGGATCAG
TCAAGGGAAGCACTAGAACCCTGGGTAGGGAAGAAAGGAGGGAAGGAAACCAATAAGGAATACTTATAATGTG
AAGGTTTGAATAAGTCCATGATGATGTCGTGGCAGAGTCTGATTCTATATAGAGGTGACTTTTTTTTAAAGTA
CTGTGCAAGCTCTGTGCTTCTATAATGTGGGAAATGCTTGGGGAGGATGGCCCTAGCTTAGGAAGACTGTTGT
GTTATTGTTCAATTCAATAAAATGATTTGTAGATCCTGC

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FIGURE 1154

MGASGSKARGLWPFASAAGGGGSEAAGAEQALVRPRGRAVPPFVFTRRGSMTYDEDGDLAHEFYEETIVTKNGQK
RAKLRRVHKNLIPQGIVKLDHPRIHVDFPVILYEV

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FIGURE 1155

GGCACGAGGCTGCGGCCGCCAGCTCCC GCGACCGCCTCTCCTGCCCTCGCCGGTACCTCAGCAAGGTGCCACTA
GAA GCGCAGGCTGGGGCGCCTCTGAGCGCCCCGCGGGGGCCATGATGGTGAACAGCAGAGGAGCAGGGGGG
CCCTGTGCCCCCGCAGTTTGCACCCGCGGACCCGGCTTGGCGGGTGTCCGGGGGGCGCGGAGGCCCAAGAA
GTACGCGATGACCGCAGCTACCAGTTGTCCAAGCAGGTGCTGGGCTGGGTGTGAACGGCAAGTGTCTGGAGTG
CTTCCATCGGCGCACTGGACAGAAAGTGTGCCCTGAAGCTCCTGTATGACAGCCCCAAGGCCCGGACGAGGTAGA
CCATCACTGGCAGGCTTCTGGCGGCCCATATTGTCTGCATCCTGGATGTGTATGAGAACATGCACCATGGCAA
GCGCTGTCTCCTCATCATCTGGAATGCATGGAAGGTGGTGAAGTGTTCAGCAGGATTAGGAGCGTGGCGACCA
GGCTTTCAGTGAAGAGAGAAGCTGCAGAGATAATGCGGGATATTGGCACTGCCATCCAGTTTCTGCACAGCCATAA
CATTTGCCACCGAGATGTCAAGCCTGAAAACCTACTCTACACATCTAAGGAGAAAGACGCAGTGTCTAAGCTCAC
CGATTTTGGCTTTGCTAAGGAGACCAACCAAAATGCCCTGCAGACACCTGTCTATCTCCCTATTTAAGTGGCCCC
TGAGGCTCTGGGTCCAGAGAAGTATGACAAGTCAATGTGACATGTGGTCCCTGGGTGTCTATCATGTACATCCTCCT
TTGTGGCTTCCCACCTTCTACTCCAACACGGGCCAGGCCATCTCCCCGGGATGAAGAGGAGGATTCCGCTGGG
CCAGTACGGCTTCCCCAATCCTGAGTGGTCAAGAAGTCTCTGAGGATGCCAAGCAGCTGATCCGCTCCTGTTGAA
GACAGACCCACAGAGAGGCTGACCATCACTCAGTTTATGAACCAACCCCTGGATCAACCAATCGATGGTAGTGCC
ACAGACCCCACTCCACACGGGCCGAGTGCTGCAGGAGGACAAAGACCACTGGGACGAAGTCAAGGAGGAGATGAC
CAGTGCCTTGGCCACTATGCGGGTAGACTACGACAGGTGAAGATCAAGGACCTGAAGACCTCTAACCAACCGGT
CCTCAACAAGAGGAGAAAAAGCAGGCAGGCAGCTCCTCTGCCTCACAGGCTGCAACCAACAGTAGCTATGGG
GCCTTGGAGGAGCCTGGCCTCTCAGCCTGCATACAGACTGAAATGTGCTCAGGCCCTGGCCAGGAGGAGGAGG
GTCTATCTTTTAAACAAAGGATTATTTTGTGTTTAAATTTGTCACTCGGAACCTTCAGGATGGAGGACCTGA
CCCTAAGCCTCCTCAGATCTCTGGGCCAGGCTCAAGCCCTAGAGATGGGACGGGCTAGGGGCTGGGAGCTGCC
TGCTGCCATAGCAGCACTTTAGCTAGGTTGGCCCCAGTGAGGCTCTGTGCTGTCTGCCCTGGTGATGGCT
TAGCTTTCTAGGCCACTGGGAGTTTGCTGGCTTCCCATCTCCACAGAGACATCTCCCTGTGGGATGGGACG
ATGGGCTTGGCCTTGAGAAAGCATTGGCCATTGGTGGCATGGTGACCAAGGACCAAGTGTCTGCTGTGAATG
CTGAGTGAGCGAGTAAGGGAGAGGGGCGATTGAGGTTCACTCTGCCCTGGGGAGGCTGATTTCTCACACACT
GGCTGGCCCTCTCATTCTCACTCCTCCTTGGGCCCTGAGGCTGTGGATCCGGTCTGCCCTCCTGTGCAAT
CCAGCCCTGCCCTGTCTGACGCCCCAGCCAGATGGCACTCAGCGCTCTCCCTGAGGGAGTCCCTGGGCCTAGCC
ATCCCTCACTATTCCGACCCAAAGGGTGACTTTTCATCTGAACCTAAGGTGGGAGATATTTTAACTTTTTC
CACTTTGGAATAATGTCACTGTGACAAAGCCAGCATACTTTCCCTGCACCACTCTGCTCACCAGATCTCAGGACG
GAAAGGCCCTCTCTGTTGAAGTCAAGGGCTATCTTTTGGTATACTTGTGTGAAGTGGCTGGTGGGAGCAGAGC
TAAGTGGCTTCCCATTAACTGAGGTCTCTTTCTTTACTCTGGGTGACACCTGAGGTTGGGGAAGGCCACTGAGC
CATGCTCAGAATGTCTGGTCTGGCTTGGGCTGAGTAGGCGAGAGGGGCTTTCATGGCTGATCAGAGCTTAC
CAGCCCCACCCACCATGGTAGCCTTAGGGTGTGAGTGGCTGTACTGCTGACAAGTGCCTGACACGACGCT
AGTTCCTTCTGGCCCTCTCTCACTGGCTGGGAAACCTAGACCATGTGATAGGACAACTGCTGGGTTTT
ACATCCAGATAGTAATAAACACCATTTTCATCAT

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FIGURE 1156

MDGETAEEQGGPVPPVPVAPGGPGLGGAPGGRREPKKYAVTDDYQLSKQVLGLGVNGKVLECFHRRTGQKCALKLL
YDSPKARQEVDDHHWQASGGPHIVCILDVYENMHHGKRCLLIIMECMEGGELFSRIQERGDQAFTERAAEIMRDI
GTAIQFLHSHNIAHRDVKPENLLYTSKEKDAVLKLTDFGFAKETTONALQTPCYTPYYVAPEVLGPEKYDKSCDM
WSLGVIMYILLCGFPFFYSNTGQAISPGMKRRIRLGQYGFPNPEWSEVSEDAKQLIRLLKTDPTERTIITQFMN
HPWINQSMVVPQTPLHTARVLQEDKDHWEVKEEMTSALATMRVDYDQVKIKDLKTSNNRLLNRRKKQAGSSSA
SQGCNNQ

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FIGURE 1157

GGCGGCATTTCCTGGTGTCTGAGCCTGGCGCGGAGGCTATGGGCAGCCAGGAGGTGCTGGGCCACGGGCCCCGGC
TGGCCTCCTCGGCTCCTCCTGTCAGGTGTTGTTTCGGTTGATCACCTTTGCTCTGAATGCATTATCTTCGCT
TCCTGTCAAAGGAAATCGTTGGCCTAGTAAATGTAAGACTAACGCTGCTTTACTCAACCACCTCTTCCTGGCCA
GAGAGGCCCTCCGCAGAGCATGTCTCAGTGGGGCACCCAGCGAGACTGGAGCCAGACCTCAACCTGCTGTGGC
TAACAGTCCCCCTGGGTGTGTTTTGGTCCTTATTCCTGGGCTGGATCTGGTTGCAGCTGCTTGAAGTGCCTGATC
CTAATGTGTGCCCTCACTATGCAACTGGAGTGGTGCTGTTTGGTCTCTCGGCGAGTGGTGGAGCTTCTAGGAGAGC
CCTTTTGGGTCTTGGCACAAGCACATATGTTTGTGAAGCTCAAGGTGATTGCAGAGAGCCTGTGCGTAATCTTTA
AGAGCGTCTGACAGCTTTTCTCGTCTGTGGTTGCCTCACITGGGGATTGTACATTTTCTCTTTGGCCCCAGCTTT
TCTATACCACAGTTCTGGTGCTCTGCTATGTTATTTATTTACAAAGTTACTGGGTTCCCCAGAATCAACCAAGC
TTCAAACCTCTTCTGTCTCCGAATAACAGATCTGTTACCCAATATTACAAGAAATGGAGCGTTTATAAACTGGA
AAGAGGCTAAACTGACTTGGAGTTTTTTCAAACAGTCTTCTTGAACAGATTTTGACAGAAGCGGAGCGATATG
TGATGACATTTTTGAATGTATTGAACTTTGGTGATCAGGGTGTTGATGATATAGTGAATAATCTTGGCTCCCTTG
TGGCCAGATTAATTTTTCAGCCAATAGAGGAAAGTTTTTATATATTTTTTGTCTAAGGTGCTGGAGAGGGGAAAGG
ATGCCACACTTCAGAAGCAGGAGGACGTTGCTGTGGCTGCTGCAGTCTTGGAGTCCCTGCTCAAGCTGGCCCCGTC
TGGCCGGCTGACCATCACTGTTTTTGGCTTGGCTATTCTCAGCTGGCTCTGGATATCTACGGAGGGACCATGC
TTAGCTCAGGATCCGGTCTGTTTTTGTCTGCTTCTTACTGTCTCTATGTTTCTCTGCTTGGCATCAATGGAGTGA
CAGAGTGTTTTCACATTGCTGCCATGAGCAAAGAGGAGGTGACAGGTACAATTTTGTGATGCTGGCCCTGTCTCT
CCTCATTCTGGTGTTATCCTATCTCTTGACCCGTTGGTGTCGACGCTGGGCTTCATCTTGGCCAACCTGCTTTA
ACATGGGCATTTCGGATCACGCAGAGCCTTTGCTTCAACCACGCTACTACCGAAGGAGCCCCACAGGCCCTTG
CTGGCCTGCACCTATCGCCAGTCTGCTCGGGACATTGCCCCAGTGGTGGGGTTACTGCTGTTTCGGAGGTAT
TCCTCTGCTGTGAGCAGGGCTGGCCAGCCGAGCTGGCACACATTGCTGTGGGGGCTCTCTGCTGGGAGCACTC
TCGGGACAGCATTCCTCACAGAGACCAAGCTGATCCATTTCTCAGGACTCAGTTAGGTGTGCCAGACGCACTG
ACAAAATGACATGACTTTCAGGGAAGCCTGGACACCCGAGGCACCTGGACCAGCTATGGGTAGTTCTGTGGGTGGA
ACACATTCTGTGTAAGAGCCCCACTGAGGGCTCTGACGCGGAGTGACAGCAACCCCAAAGATGAGGCACACAGA
GTGCCACTGCATGAGACACCTGTGACCATTGGAAGTCTGAAATGCGGGGGGGGAGTTTCATTTTTAAGTGAAGAC
CAAAAGCCCTTTAAAAATAATAGTTTTTATCATTTTATAGTAAAAAAAAAAAAAGGGCGGACCATCAATCAG
CACGAGCAAGAAAGCACATTCTACTAGACTATACAAAAA

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FIGURE 1158

MGSQEVLGHAARLASSGLLQVLFRLITFVLNAFILRFLSKEIVGVNVRLTLLYSTTLFLAREAFRRACLSSGT
QRDWSQTLNLLWLTVP LGVWSLFLGWIWLQLEVPDPNVVPHYATGVVLFGLSAVVVELLGEFFWVLAQAHMFVK
LKVIAESLSVILKSVLTAFVLVNLPHWGLYIFSLAQLFYTTVLVLCYVIYFTKLLGSPES TKLQTLPVSRITDLL
PNITRNGAFINWKEAKLTWSFFKQSF LKQILTEGERYVMTFLNVLNFGDQGVYDIVNNLGS LVARLIFQPIEESF
YIFFAKVLERGKDATLQKQEDVAVAAVLESLLKLALLAGLTIITVFGFAYSQALDIYGGTMLSSGSGPVLLRSY
CLYVLLAINGVTECFTFAAMSKEEVD RYNFVMLALSSSFLVLSYLLTRWCGSVGFILANCFNMGIRITQSLCFI
HRYVRRSPHRFLAGLHLSPVLLGTFALSGGVTA VSEVFLCCEQGWPARLAHIAVGAFCLGATLGTAFLTETKLIH
FLRTQLGVPRRTDKMT

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FIGURE 1160

MESYHKPDQKQLQALKDTANRLRISSIQATTAAGSGHPTSCCSAAEIMAVLFFHTMRYKSQDPRNPHNDRFVLSK
GHAAPILYAVWAEAGFLAEAEELNLRKISSDLGDGHPVKQAFDTDVATGSLGQGLGAACGMAYTGKYFDKASYRVY
CLLDGDELSEGSVWEAMAFASIYKLDNLVAILDINRLGQSDPAPLQHQMIDIYQKRCEAFGWHAIIVDGHVSVEELC
KAFGQAKHQPTAIIAKTFKGRGITGVEDKESWHGKPLPKNMAEQIIQEIYSQISKKKILATPPQEDAPSVDIAN
IRMPSLPSYKVGDKIATRKAYGQALAKLGHASDRIIALDGDGDKNSTFSEIFKKEHPDRFIECYIAEQNMVSIAGV
CATRNRIVPFCSTFAAFPTRAFDOIRMAAISESNINLCGSHCGVSI GEDGPSQMALEDLAMFRSVPTSTVFYPSD
GVATEKAVELAANTKGICFIRTSRPENAIYNNNEDFQVGQAKVVLKSKDDQVTIVIGAVTLHEALAAAEELLKKE
KINIRVLDPFTIKPLDRKLILDSARATKGRILTVEDHYEGGIGEAVSSAVVGEPGITVTHLAVNRVPRSGKPAE
LLKMF GIDRDAIAQAVRGLITKA

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FIGURE 1161

AGAAGCCTCCTGGCAGACACTGGAGCCACGATGAAGCCCCCAAGGCCTGTCCGTACCTGCAGCAAAAGTTCTCGTC
CTGCTTTCAGTGTCTGGCCATCCACCAGACTACTCTGCCGAAAAAATGGCATCGACATCTACAGCCTCACCCTG
GACTCCAGGGTCTCATCCGATTTCGCCACACGGTCTGCCAGCCAGTGGTCAATAGGGCCAAATCTGTGCGAG
GAGGCCACCTCCAGATGGAGCTGCCAAGAAAGCCTTCATCACCACCTTCTCCATGATCATCGATGGCATGACC
TACCCAGGGATCATCAAGGAGAAAGGCTGAAGCCCAGGCACAGTACAGCGCAGCAGTGGCCAGGGGAAAAGCGCT
GGCCTCGTCAAGGCCAACGGGAGAAACATGGAGCAGTTCAGGTGTCCGTCAGTGTGGCTCCCAATGCCAAGATC
ACCTTTGAGCTGGTCTATGAGGAGCTGCTCAAGCGGCGTTTGGGGGTGTACGAGCTGCTGCTGAAAGTGGCGCCC
CAGCAGCTGGTCAAGCAGCTGCAGATGGACATTACATCTTCGAGCCCCAGGGCATCAGCTTTCGAGACACAGAG
AGCACCTTCATGACAACACAGCTGGTAGACGCCCTCACCACCTGGCAGAAATAAGACCAAGGCTCACATCCGGTTC
AAGCCAAACATTTCCAGCAGCAAAAGTCCCAGAGCAGCAAGAAACAGTCTGGAGCGGCAACCTCATTATCCGC
TATGATGTGGACGGGCCATCTCCGGGGGCTCCATTGAGTCGAGAACGGCTACTTTGTACACTACTTTGGCCCC
GAGGGCTAACCACAATGCCAAGAATGTGGTCTTTGTCAATTGACAAGAGCGGCTCCATGAGTGGCAGGAAAAATC
CAGCAGACCCGGGAAGCCCTAATCAAGATCCTGGATGACCTCAGCCCCAGAGACCAGTTCACCTCATCGTCTTC
AGTACAGAAGCAACTCAGTGGAGGCCATCACTGGTGCCAGCCTCAGCGAGAACGTGAACAAGGCCAGGAGCTTT
GCTGCGGGCATCCAGGCCCTGGGAGGGACCAACATCAATGATGCAATGCTGATGGCTGTGAGTGTCTGGACAGC
AGCAACAGGAGGAGCGGCTCCCGAAGGGAGTGTCTCACTCATCATCTGCTCAGCCGATGGCGACCCCACTGTG
GGGGAGACTAACCCAGGAGCATCCAGAATAACGTGCGGGAAGCTGTAAGTGGCGGGTACAGCCTCTTCTGCCTG
GGCTTCGGTTTCGACGTGATGCTTCTCTGGAGAAGCTGGCAGTGGCAATGGCGGCTGGCCCCGGCGCATC
CATGAGGACTCAGACTCTGCCTCGAGTCCAGGACTTCTACCAGGAAGTGGCCAAACCACTGCTGACAGCATG
ACCTTCGAGTCCGAAGCAATGCCGTGGAGGAGTCACTCAGAACAACTTCGGCTCTCTTCAAGGGCTCAGAG
ATGGTGGTGGCTCCGAAGCTCAGGACCGGGGGCTGTGTGCTCAGCAGCAGTCACTGGGAAGCTGCCTACA
CAGAACATCACTTTCCAAACGGAGTCCAGTGTGGCAGAGCAGGAGGCGGAGTTCAGAGCCCCAAGTATATCTTC
CACAACCTTCATGGAGAGGCTCTGGGCATACCTGACTATCCAGCAGCTGCTGGAGCAAACTGTCTCCGCAATCCGAT
GCTGATCAGCAGGCGCTCCGGAACCAAGCGCTGAATTTATCACTTGCCCTACAGCTTTGTACCGCTCTCACATCT
ATGGTAGTCACCAAAACCGGATGACCAAGAGCAGTCTCAAGTTGCTGAGAAGCCCATGGAAGGCGGAAAGTGA
AGGAATGTCCACTCAGGTTCCACTTTCTTCAAAATATTATCTCCAGGGAGCAAAAAATACCAAAACCAAGGCTTCC
TTTTCTCCAAGAAGAGGATGGAATAGACAAGCTGGAGTGTGGTCCCGGATGAATTCAGACCTGGGGTTCTC
AGCTCCAGGCAACTTGGACTCCAGGACCTCTGATGTTCTTGACCATGCTGCTTACCAACCCCTTCCGCGCTGTG
GCCATCTTGCTGCTTCAGCAACCAAGCCACCTCAAATCTGATCCAGCTGTGTCTCTGCTGATGAATATGAAA
ATCGAAGAAACCAATGACAACCAAAACCCAGCCCCATACAGGCTCCTCTGCCATCTGCCACTGCCTGGG
CAGAGTGTGGAGCGGCTCTGTGTGGACCCAGACACCGCCAGGGGCCAGTGAACCTGCTCTCAGACCTGAGCAA
GGGGTTGAGGTGACTGGCCAGTATGAGAGGGAGAAAGGCTGGTTCTATGGATCGAAGTGACCTTCAAGAACCCC
CTGGTATGGGTTACAGCATTCCTCTGAACACGTGGTGGTGAATCGGAAACCGAAGAGCTCTGCTACAAGTGGAAAG
GAGACGCTATTCTCAGTGTATGCCCGGCTGAAGATGACCATGGAACAGCGGCTCTCTGCTGCTCAGTACGCCA
GACAAAGTGACCATCGGCTGTTGTTCTGGAGTGCCGTGGGAGGGGCTCCGGCTCCTCTGCGTGACATGAC
CGCTTCTCCAGCCAGTGTGGAGGGACCTTGGCCAGTTTACCAGGAGGTGCTCTGGGGATCTCCAGCAGCATCA
GATGAGCGCAGACGCAAGCTGAGGGTTCAGGGCAATGACCATCTGTCACACAGAGAGCGCAGGCTGGATTACAG
GAGGGGCCCCGGGAGTGGAATTTCTGCTGTGTCTGTGGAGCTGTAGTTCTGATGGAAGGAGCTGTGCCACCCC
GTACACTTGGCTTCCCCTGCAATGCAAGGCGCTTCTGGGCTCGGACCAACATGGGGAGGAAGAGTCCCAC
TCATTACAAATAAAGAAAGGTGGTGTGAGCCTGGG

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FIGURE 1162

GCGCCGCCAAGCGATCCCTGCTCCGCGCGACACTGCGTGCCCGCGCAGCAGAGAGCGGTGACGCACCTTTACG
GCGGCAGCGTAAGTGCGTGACGCTCGTCACTGGCTTCAGTTCACACGTGGCGCCAGCGGAGGCAGGTTGATGTGT
TTGTGCTTCCTTCTACAGCCAAATATGAAAAGGCCAAGTTAAAGAAAGCAAGTAAACGCATGACCTGCCATAAGC
GGTATAAAATCCAAAAAAGGTTTCGAGAACATCATCGAAAATTAAGAAAGGAGGCTAAAAAGCGGGGTACAAGA
AGCCTAGGAAGACCCAGGAGTTCCAAAACAGTGCTCCCTTTAAGGAGGCTCTTCTTAGGGAAGCTGAGCTAAGGA
AACAGAGGCTTGAAAGACTAAAACAGCAGCAGAACTTGACAGGCAGAAAGGAAGTAAAAAGAAAAGAAAACCTTG
AACTAATCCTGATATTAAGCCATCAAATGTGGAACCTATGGAAGGAGTTTGGGCTTTGCAAACTGAGAACA
AAGCCAAGTCGGGCAACAGAAATCAAAGAAGCTGTACTGCCAAGAACTTAAAAAGGTGATTGAAGCCTCCGATG
TTGTCTTAGAGGTGTTGGATGCCAGAGATCCTCTTGTTGTCAGATGTCCTCAGGTAGAAGAGGCCATTGTCCAGA
GTGGCAGAAAAAGCTGGTACTTATATTAATAAATCAGATCTGGTACCAAGGAGAAATTTGAGAGCTGGCTAA
ATTATTTGAAGAAAGAAATTGCCAACAGTGGTGTTCAGAGCCTCAACAAAACCAAGGATAAGGGAAGATAACCA
AGCGTGTGAAGGCAAGAAAGATGCTGTCTCCATTGAGAAGTGAAGTCTGCTTTGGGAAAGAGGGCCTTTGGAAC
TTCTTGGAGTTTTTCAGGAACTTGCAGCAAGGCCATTGGGTTGGAGTAATTTGGTTTCCAAATGTGGGAAAA
GCAGCATTATCAATAGCTTAAAAACAAGAACAGATGTGTAATGTTGGTGTATCCATGGGGCTTACAAGGAGCATGC
AAGTTGTCCCTTGGCAAAACAGATCACAAATCATAGATAGTCCGAGCTTATCGTATCTCCACTTAATTCCTCT
CTGCGCTTGCTCTGCGAAGTCCAGCAAGTATTGAAGTAGTAAACCAGTGAGGCTGCGAGTCCATCCTTTCCC
AGGCTGATGCTCGACAGGTAGTACTGAAATATACTGTCCAGGCTACAGGAATTCCTGGAATTTTTACTGTGC
TTGCTCAGAGAAGAGGTATGCACCAAAAAGTGGAATCCCAATGTTGAAGTGCTGCCAACTGCTGTGGTCTG
AGTGGCAGGTGCCTCATTAGCTTACTATTGCCATCCCCCTACATCTTGGACTCCTCTCCATATTTAATGAGA
GTATTTGGTAGACATGAAAAGCGGCTTCAATCTGGAAGAACTGGAAGAAACAAATGCACAGACATAAGAGCCA
TCAAGGGCCCTCATTGGCCAAATAGCATCCITTTCCAGTCTTCGGTCTGCACAAATGGAATTAATAGAAAGAAAGG
ACATACATGAAGAATTGCCAAAACGGAAAGAAAGGAGCAGGAGGAGGAGGATGACAAAGACAGTGACCAGG
AACTGTGTGATGAAGAAGTTGATGAAAACAGCTCAGGCATGTTTGCTGCAGAAGAGACAGGGGAGGCACCTGTCTG
AGGAGACTACAGCAGGTGAACAGTCTACAAGGTCTTTATCTTGGATAAAATCATTGAAGAGGATGATGCTTATG
ACTTCAGTACAGATTATGTGTAAAGAACAAATGGCTTTTATGATTTTTTTTTTAACTTTTAAAGCAGCTGCTA
AACTGTCTCTGTATAAGTTATGGTATGATGAGCTGTGTAATTTTGTGAATGTATTATATTAATAACCAAGC
AACTTGAATCCCTAAATTCGTAAAAAGACAATTCATCTATTGTGAGTGAAGTAGTTATCTGGAATAAAAA
AGAAGATACCTATTG

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FIGURE 1163A

ACTCTGTCTGGACAGCGTGCCACCAGCCATGCGGGGCCCGGGGCTCTCTCCACTCTGCCTCTGGCCTTC
TGCTTGGCAGGCTTCAGCTTCGTACAGGGGGCAGGTGCTGTTCAAAGGCTGTGATGTGAAAACCACTGTTGTCACT
CATGTACCTCTGCACCTCGTGCAGGGCCATCAAGAAGCAGACGTGTCTCTCAGGCTGGCTCGGGAGCTCCCGGAT
CAGATAACCCAGGACTGCCGCTACGAAGTACAGCTGGGGGCTCTATGTGTGTCATGAGCGGCTGCAGACGGAAG
TGCCGGAAGCAAGTGGTGCAAGAGGCTGTGCGCTGGCTACTGGGGTTCCTCGGTGCCATGAATGCCCTGGGGG
GCTGAGACCCCAATGCAATGGCCACGGGACCTGCTTGGATGGCATGGACAGGAATGGGACCTGTGTGTGCCAGGAA
AACTTCGCGGGCTCAGCTGCCAGGAGTGCCAAAGCCCCAACCGGTTGGGCGCTGACTGCCAATCGGTGTGCAGC
TGTGTGCACGAGGTGTGCAACCATGGGCCACGTGGGGATGGAAGCTGCGCTGTGCTTTGCTGGATACACTGGCCCC
CACTGTGATCAAGAGCTGCCGCTCTGCCAGGAGCTGCGCTGTCCCCAGAACCACCACTGCTGCCAGAGGCTCCC
AGCTGCAGGTGCTGCCGGCTACACACAGAGGGCAGTGAATGCCAGCCCCAACCCCTGCTGGCCATCACCC
TGCTCACTGTGGCCAGTGTCTCGGTGAGCCCCAAGGGGCAGGCTCAGTGTCACTGCCCTGAGAACCTACCATGGC
GATGGGATGGTGTGTCTGCCAAGGACCCATGCACTGACAACCTTGGTGGCTGCCCAAGCAACTCTACTTTGTGT
GTGTACCAAGAGCCGGGCCAGGCTTCTGCACTGCCGGCCAGGCTGGTCAGCATCAACAGCAACGCTTCTGCG
GGCTGCTTCGCTTCTGTCTCCCTTCTCTCTGCGACCGGCTGTGCCACTTGCCAGGTGACCGCTGTATGGGAAGACC
AGCTGTGTGTGCAGGGAAGCGAGGTGGGGGATGGGCGTGCTGCTACGGACACTGCTCCAGGAGGTGCAGAG
GCCACGCAGACAGGCGGGGTGTTCTTGCTGAGCTGAGGCTGCGGTCAGTGCATGACCGAGGCTGCCGGGAATC
CTTACCAAGCGGGGCTTTTACCGTGTGTTGCCATCCGCTCTCTCTTCTCTCTCCAGGACCAATGAATGCATCC
CTTGCCAGGAGCTCTGTAGACAGCATATCGCAGGGCAGCAGCATCTCGGAGGACCAAGAGGACCAATGCAACCA
CGAAGGTGGTGACGCTGGCGGGCAGGAGATCACCGCTCACTTTAACCAATTCAGAAATCTCTTACAAGTAC
AAAGACCAGCCCCAGCAGAGCTTCAACATCTACAGGCCCAACAACATAGCAGCTAATGGCGTCTCCAGCTGGTCT
ACTGGCCTGCGGTGGCAGGCCCCCTCTGGGACCCCTGGGATCCCAAGAGAACTGTGGGCTGCCCTCCATCTGGACGGACCTGGGCC
ACCGAGGCTTCAGCGCTTTGAAACCATCTTGAGAGAACTGTGGGCTGCCCTCCATCTGACGAGGCTGACCTTGAAGGCTCATC
TTCACAGCTTTTGCCCAAGCAATGAGGCTGTGGACAGCTTGGCTGACGCGCCGCTGATCTACCTTTCACAGGC
GGTCTCTCTAAACTGCAGGATGTGGTGGCTTACCACATCTACAACCAAGCCAGCTGACCTTGAAGGAGGCGCATCTGTGCT
GGACCCGAGGGGCTCCGCTGCAGAGGCTAGACGTGATGGCCGCAATGGTGTGATCCATGCTGGACGGCATC
CTGCTGCCCGGACCATCTTCCCATCTTCCCAAGCACTGCAGCGAGGAGCAGCAAGATTTGGCGGGCTCC
TGTGTGGACTGCCAAGCCTGAACACAGCAGCAGTGTCCCCCAACAGTGTGAAGCTGGACATCTTCCCAAGGAG
TGTGTCTACATCCATGACCAACGGGGCTCAATGTGCTAAGAAGGGCTGTGGCAGTACTGCAACCAACCATC
ATGGAACAAGGCTGCTGCAAGGTTTTTTCGGGCTGACTGCACGAGTGTCTGGGGCTTCTCCAAACCCCTGC
TATGGCAAGAGCAATGCAAGTGTGGGATCCAGGGCAATGGGGCTGCTGCTGGGGCTTCTCCAAACCCCTGC
GCTGCCACATCTGCTGCACCCCAACAAGCATGGAGCAATGCCAGAGACTGCGGCTGTGTCCATGGTCTC
TGCACAAACCCGAGCAGTGGGGGGTGTGCCAGAGGCGAGTGTGCCCTGCTGCTTCCAGACTCAAGGGCATC
AACGAGTCCATGGGGGACTGTGGGCCACAGGCTGGCCAGCACTGCCACTGCCATGCCCTGAGTACCAACCCCTGC
GAGGGTGTGCCAGATGTGCGCTGTCTGTATGGCTTTGAGGGTGTGGCTTCTCTGCAACCTAGCAACCCCTGC
TCCCAACCCGAGCGGTGAGGCTGCTCAGAGAATGCTGAGTGTGTCCCTGGGTCCCTGGGACCCACCACTGC
TGCCACAAGAGCTGGAGTGGGATGGCCCGCTGTGTGGCTATTGACGAGTGTGAGCTGGACATGAGAGGTGGC
TGCCACACCGATGCCCTGTGACGCTATGTGGGCCCGGGCAGAGCCGATGACCTGCAAGCTGGGCTTTGGCGGG
GATGGCTACAGTGCAGCCCCATCGACCCCTGCGGGCGAGGCAATGGCGGCTGCCAGGCGCTGGCCACCCGCG
GCAGTGGGGGAGGTGAGCGGCTGTGACGTGCCCGCTGGCTTTGGGGGTGATGGCTTACGCTGTATGAGAGC
ATCTTCCGGAGCTGGAGGCAATGCCACTTCTCCATCTTCTACCAATGGCTTAAGAGTGCAGGCTCACGCTT
TCTTGCTGCAGCAAGGACGCTGCCAAGCTGGTCAGGGCCCACTTTCTCAGGGTGGCTTCTCAGGAGGAG
CTGGCCCGGCTGGTGGGAGGAAGTGGCCACCCCTGAACCCCAACAGCTGGGAGATTGCAACATATGTTGG
AGGGTCTGGGTGAGAAATGCAAGCGTGGATGTGGCTGACCTTCTGCCACCAACGGTGTCTTACACATCTCGCTGC
CAGGTCTTACTGCCCCCCGAGGGGATGTGCCCGGTGGGCGGGGTGCTGCAGCAGCTGGACTTGTGCTGGC
TTACGCTTCTCCGGGAAATGCTGCAGCACCATGGGTGGTGGCCAGATTGGCTGGCATGCTGCTTACCATC
TTTGTGCCCAACCAAGCTCTCTGGAGGCCAGGGCAACAGCAGTCACTTGACGCAGACAGTGGCGGACCAT

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FIGURE 1163B

GTGGTCTGGGGGAGGCCCTCTCCATGGAACCTGCGGAAGGTTGGACACCGCAACTCCCTCTGGGCCCTGCCC
CACTGGAATGCTCTTCTACAACCAACAGTGGCCAGCCTGAGGTTGAACCATGTGCCACTGGAAGGCCCATGCTGGAG
GCCCTCGCCCTCGCTGATTGGTCTGTGCGGGGTCTGACGGTGGGCTCAAGTCCGCTGCCATAGCCACAGCT
GAGGCCCTGCGGGAGAAATGTGTAATTCGACCAGGAGATTCCGCTGCACTCAGGGCTTCCAGCTGAGGACACA
CCCAGGAAGAGCTGTGTCTACCGATTCTGGCTTCTCCTCTCCCGGGGCTGTCTTACACATGTGCCAAGAAATC
CAGGTGCCCGGACTGCTGCCCTGGTTCTTTGGCAGCGTGTGAGCCATGCCACAGGGGCTAGGGGGGGGTGTGC
TCAGGCCATGGGCAGTGCCAGGACAGTCTTCTGGGCAGCGGGGAGTGCCACTGCCACGAGGGCTTCCATGGAACG
GCCTGTGAGGTGTGTGAGCTGGCGCGCTACGGGCCCACTGCACCGGAGTGTGTGACTGTGCCCATGGGCTGTGC
CAGGAGGGGCTGCAAGGGGACGGAAGCTGTGTCTGTAACTGGGCTGGCAGGGCTCCGCTGTGACAGAAAATC
ACGAGCCCTCAGTGCCTTAGGAAGTGCAGCCCAATGCCAACTGCGTGCAGGACTGGCCGGAGCCTCCACCTGCG
GCCTGTGCTGCGGGATACTCCGGCAATGGCATCTTCTGTTCAGAGGTGAGCCCTGCGCCACCGCCATGGGGG
TGCTCCCTCATGCCAACTGTACCAAGGTGGCAGCTGGGCAGCGGACATGCACCTGCCAGGATGGCTACATGGGC
GACGGGAGCTGTGCCAGGAAATTAACAGCTGTCTCATCCACAGGGGGCTGCCACATTACGCCGAGTGCAATC
CCCACTGGCCCCAGCAGGCTCTCTGCAGCTGCGCTGAGGGTTACAGCGGGGATGGCATCCGGACCTGCGAGCTC
CTGGACCCCTGCTCTAAGAACAATGGAGGATGCAGCCCATATGCCACCTGCAAAAAGCAGAGGGGATGGCCAGAGG
ACATGTACTGTGCACACAGCCCAACGCTGGGGGACGGCTCAGCTGCCGTGCGGCTGCGCTGGGCTTCCGCTG
AGGGATAAGCATGCCTCATTCTTACGCTCCGCTCCTGGAATATAAGGAGCTCAAGGGCGATGGGCTTTCACC
ATCTTCGTGCCACGAGATCTAATGAGCAACCTGTGCGAGGATGAGCTGGCCCCGATCTGTGCGCATCGCCAG
CTGTGTTTCGTCTACCAAGTGGTTGGCTGTGCGCGCTGCGGAGCGGAGGACCTGCTGGAGCAGGGGTACGCCAGC
GCCCTCTCAGGGCAGCCAGCTGCGCTTACGCGAGAGGGAGGGCAGCATATACCTCAATGACTTGCAGCGCTGTGTG
AGCAGCGACCATGAGGGCGTGAACGGCATCTCGACTTCATTGACCGTGTCTGCTGCCCGCCGAGCGCGCTGCAT
TGGGAGCCTGATGATGCTCCCATCCGAGGAGAAATGTACCGCCCGCCCGCAGGGCTTCGGTTACAAGATCTTC
AGCGGCCCTCTGAAGGTGGCCGGCTCTTGCCTGCTGTGAGAGGATCCCATAGGCCCTTCACAATGCTGTGG
CCCACAGACGCCGCTTTCGAGCTCTGCTCCGGATGCCAGGCTGGCTGTACCATAGGAGACCCGTGACAAAG
CTAGCAGCCATTCTGCGGGGCCACATGATTCGCAATGTGAGGCGCTTGGCATCTGACTGCCCAACCTGGGCCCA
CTTCGAACCATGCATGGGACCCCATCTCTTCTCTGACGCCGAACGCGGGCGGTGAGCTCATGGTGGGTGAG
GATGATGCTCGATTGTGACGGGCACTTGCCCTTTGAGGGTGGCTGGCCTATGGCATGCACAGCTGCTGGAG
CCACCTGGCCTTGTGCTCGCTGTGACCACTTTGAGACCGGGCCCTGCGACTGAACACCTGCAGCATCTGTGGG
CTGGAGCCACCTGTCTGAGGGGTACAGGAGCAGGGCAGCCTGAGGCTGCTGGCGCTTACCCGAAGTTC
TGGACGTCCCTCCGCTGCATCTTTGGGATTACGCAGCGTCTGGGTCCACCCAGGCTTTGGGTAGGCCCAAG
GGCTTGGGCAGGGGCTGCCACCGCAATTGTGTACCAACCACTGGGAAGCCCAAGCTGCTGCCCTGACTGAGT
AGTGAAGTGCACAGCTTGGCTGGCGGCCCAAGCAGCCCTGTAGTGACCGTGGCGTGTGATGGAAGGCGATGAGT
GGCAGTGGGCACTGTGTGTGCGGCTCAGGTTTGTGGTGGGACAGCTGTGAATCTGTGTCTTGTGCTTGTGGG
CTGTGATGCAAGCTGCGGCTGCACTGTGATGAGGGCTGTGATGAGGGCTTGGGGCTTGGCTCTGCTGCT
TGTGATGAAGGCTGCACTGGGCCACGCTGTGAGGTGCAACTGGAAGTGCAGCTGTGTGTACCCACCTGTGCA
CCGAGGCTGTGTGCCGTGCAGGCAACAGCTGTGAGTGCAGCTTGGGCTATGAAGGGGATGGCGGTGTGTGACA
GTGGCAGCTGTGCCAGGACGGGCATGTTGGCTGCACTGAGCAGGCCAATGTAGCCAGGTAGGAACAATGCTC
ACTTGTACTGCTGCCGACTACAGGGGTGATGGCTGGAGCTGGCGGGCCGCAACCCCTGCACAGATGGCCAC
CGCGGGGGCTGACAGGACGACCTCACTGCTTGAACACCGGCTGAACACAGCGCCTGTGAGTGGCCACGACGAG
TACGTAGGCGATGGAATGCAGTGTCTGGAGGAGTGGGAACCACTGTGGACCGCTGTGTGGCCAGGCCCGGCC
TGCCACTAGATGCCATGTGCATGACCTGCATCTCCAGGAGAAACGGGCTGGCGTTTTCCACCTCCAGGCCAC
AGCGGCCCTTATGCTTGAACCTTTTCGAGGCTGAGGCGGCATGCGAAGCAGAGGAGCGCTCTGCTTATTC
CCTCAGCTCTCTGCTGGCCAGCAGCTGGGCTTCCACCTGTGCTCATGGGCTGGCTGGCCAATGGCTCCACTGCC
CACCCTGTGGTTTTCCTGTGCGGCACTGTGGCAATGGTGGGTGGGCATGATGAGCTGGGTGGCCGCAAGAAC
CTCTCAGAAGCGTGGGATGCTACTGCTTCCGTGTGCAAGATGTGGCTTGGCGATGCCGAAATGGCTTCTGTGGT
GACGGGATGGCAGCTGCAATGGGAAGCTGCTGGATGTGCTGGCTGCCACTGCCAACTCTCCACCTTCTAGGG
ATGCTATTGGGCTATGCCAATGCCACCCAGCGGGGCTGACTTCTGACTTCTGGATGATGAGCTCAGTAT
AAGACACTCTTCTGCTGCTCAATGAAGGCTTTGTGGACAACATGACGCTGAGTGGCCAGACTTGAAGGTGCAAT

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FIGURE 1163C

GCCTCCAACGCCACCCTCCTAAGTGCCAACGCCAGCCAGGGGAAGTTGCTTCCGGCCCACTCAGGCCTCAGCCTC
ATCATCAGTGACGCAGGCCCTGACAACAGTTCCCTGGGCCCTGTGGCCCCAGGGACAGTTGTGGTTAGCCGTATC
ATTGTGTGGGACATCATGGCCITCAATGGCATCATCCATGCTCTGGCCAGCCCCCTCCTGGCACCCCCACAGCCC
CAGGCAGTGTGGCGCCTGAAGCCCCACCTGTGGGGCAGGCGTGGGGGCTGTGCTTGCCGCTGGAGCACTGCTT
GGCTTGGTGGCCGGAGCTCTCTACCTCCGTGCCCGAGGCAAGCCCATGGGCTTGGCTTCTCTGCTTCCAGGCG
GAAGATGATGCTGATGACGACTTCTCACCGTGGCAAGAGGGACCAACCCACCCCTGGTCTCTGTCCCCAACCCCT
GTCTTTGGCAGCGACACCTTTTGTGAACCCCTTCGATGACTCACTGCTGGAGGAGGACTTCCCTGACACCCAGAGG
ATCCTCACAGTCAAGTGAACGAGGCTGGGGCTGAAAGCAGAAGCATGCACAGGGAGGAGACCACCTTTTATTGCTTG
TCTGGGTGGATGGGGCAGGAGGGGCTGAGGGCCTGTCCAGACAATAAAGGTGCCCTCAGCGGATGTGGGC

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FIGURE 1164

MAGPRGLLPCLLAFCLAGFSFVRGQVLFKGDVKTTFTVTHVPTSCAAIKKQTCPSGWLRELPDQITQDCRYEV
 QLGGSVMVSMSCRRKCRKQVQKACPCGYWGSRCHECPGGAETPCNCGHGTCLDGMDRNGTCVCQENFRGSACQEC
 QDPNRFPGDCQSVCSCHVHCNCHGFRGDSCLCFAGYTGPHCDQELPVCQELRCQNTQCSAEAPSCRLCPGYTQ
 QGSECRAPNFCWSPCSLLAQCSVSPKQAQCHCPENYHGDGMVCLPKDPCTDNLGGCPSNSTLCVYKQPGQAF
 TCRPGLVINSNASAGCFACSPFSCDRSATCQVADGKTSVCVCRESEVGDGRACYGHLLEHVQKATQTGRVFTIQ
 LRVAVAMMDQGREILLTAGPFTVLVPSVSSFSRRTMNASLAQQLCRQHI IAGQHILEDTRTQOTRRWWTLAGQE
 ITVTFNQFTKYSYKYKDQFQQTFTNIYKANNIAANGVFHVVTGLRWQAPSGTPGDPKRTIGQILASTEAFSRFETI
 LENCGLPSILDGPGPFTVFAPSNFAVDSLRDGRLIYLFYTAGLSKLQELVRYHIYNHGQLTVEKILSKGRILTMAN
 QVLAVNISSEGRILLGPEGVLPQRVDVMAANGVIHMLDGLLLPPTILPILPKHCSEEQHKIVAGSCVDCQALNTS
 TCFPNVSKLIDFPKECVYIHDPTGLNLVKKGCASYNQITIMEQGCKGFFGPDCTQCPGGFSNFCYKGKNCSDGI
 QQNGACLCFPDYKGIACHI CSNPNKHGECQEDCGCVHGLCDNRPGSGGVCCQGTGCPGFSGRFCNESMGDCGPT
 GLAQHCHLHARCUSQEGVARCRLDGFEGDGFSCTPSNP CSHPD RGCCSENAECVPSGLTGHHTCHKGWSGDGR
 VCVAIDECELDMRGGCHTDALCSYVGFGQSRCTCKLGFAGDGQYQCSPIDPCRAGNGGCHGLATCRAVGGGQVRCT
 CPPFGGDDGFSCYGDIFRELEANAHFSIFYQWLKSAGITLPADRRVTALVPSEAAVRQLSPEDRAFWLQPRTLPN
 LVRAHFLOQALFEEELARLGGQEVATLNPTRWEIRNISGRVWVQNASVDVADLLATNGVLHLISQVLLPPRGD
 VPGGQGLLQQLDLVPAFSLFRELLQHHGLVFOIEAATYTTIFVPTNRSLEAQGNSSHLADATVRHHVVLGEALSME
 TLRKGGHRNSLLGPAHWIIFYNHSQGFEVNHVPLEGPMLEAPGRSLIGSGVLTVGSSRCLHSHAEALREKVCNC
 TRRFRTCTQGFQQLDTPRKSCVYRSGFSFRGCSYTCAKKIQVPDCCPGFFGTLCPECPGGLGGVCSGHGQCDRDF
 LQSGECHCEGHFTGTACEVGLDGRYGFNCTGVCDCAHGLCQEGLDGDSGVCSNVGWQLCRDKQITSPQCPRKCD
 PNANCVQDSAGASTCACAAAGYSNGNIFCSEVDPCAHGHGGCSPHANCTKVAPGORTCTCQDGYMGDGLCQINS
 CLIHGGGCHIAECIPTGFPQVQVSCSREGYSGDGIRTCCELLDPCSKNNGGCSPYATCTGDQORTCTCDTAHTV
 GDGLTCRARVGLLELLRDKHAFSFLRLLEYKELKGDGPFITFVPHADLMSNLSQDELARIAHRQLRVFRYHVGC
 RRLRSEDLELQGYATALSHPFLRFSEREGSIYLNDFARVVSDDHEAVNGILHFI DRVLLPEALHWEPPDAP IPR
 RNVTAAGQGGYKIFISGLLKVAGLLPLLRASHRPFTMLWPTDAAFRALPPDRQAWLYHEDHRDKLAAILRGHMI
 RNVEALASDLPLNLGFLRTMHGPTISFSCSRTRAGELMVGEDDARIVQRHLPEFEGGLAYGIDQLLEPPGLGARCH
 FETRPLRLNTCSI CGLEPPCPEGSQEQGSPEACWRFPYKFWTSPLHSLGLRSVWVHPSLWGRFPQGLGRGCHRNC
 VTTITWPKSCCPGHYSGECQACPGGSSPSCDRGVCMDSGSGQCLCRSFGAGTACELCAPGAFGPHCQACRCTV
 HGRCDGELGGSGSCFCDEGWTGPRCEVQLELPVCTPPCAPEAVCRAGNSCECSLGYEGDGRVCTVADLCQDGHG
 GCSEHANCSCVQVTMTCTCLPDYEGDGSRCARNPCTDGHRRGCS EHANCLSTGLNTRRCECHAGYVGDGLQCLE
 ESEFPVDRCLGQPPPHCHSDAMCTDLHFQEKRAGVFHLQATSGFYGLNFSAEAEACEAGVLAASFQLSAAQQLG
 FHLCLMGWLANGSTAHFVVFVADCGNGRVGIVSLGARKNLSEWRDAYCFRVQDVACRCRNGFVGDISCTCNGL
 LDVLAATANFSTFYGMLLGYANATRGDLDFLDLDELTYKTLFVFNVEGFVDMNTLSGPDLELHASNATLLSAN
 ASQGLKLLPAHSGLSLI ISDAGPDNSSWAPVAPGTVVVSRI IVDIMAFNGI IHALASPLLAPQPOQAVLAP EAPF
 VAAGVAVLVAAGALLGLVAGLYLRARGKPMGFGFSFAQAEDDADDPSFWQEGNTPLTVSVFNPVFGSDTFCEP
 FDDSLLEEDFPDQIRILTVC

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FIGURE 1165A

CGCGCGGTGGCGGCGGAGACCCGAACATCGCGACCGCGCGCACTTCGGGGCCGAGCGGGAAGCCGAGCGCGCCA
AGGAAGCGCGCGCTCGTGGGCTCGGAGCTTTGTGGACACTTATACGGTTTACATCATCAGGTCAGTATGGCAGCC
ATGAGTGGACAGTAAGACCCAGCTACAGCACTTCCATGACCTGCATGAAAGAGCTCGTTGAGAGGAAAGATTG
ATAAAAACCTGCTCCGCCCAAAAGATAATTGGGAAAACTCAAGAAGCTTGGTGGAAGAAGGGGAGAAGGATC
TGGAGGCTCTACCTCGCAAGAGCTCCTGGCTGCCCTCCCTGGCGTGACCCCCAGAGTACTGGCCCACTTCTTGCAAT
TTCACTTCTATGAGATAAATGGCACTACCGCGGCACCTGGCTGAAGAGCTCTTGAGAGAGCTTAACTACCTTAAAG
GGGCGCGGCGAGGCTTTGGCATTGGACCCCTGCAGCTGTATGCCGTACGGAGCAGCTGCAGCAGGGAAGGCCCA
CGTGGCCAGTGGGAGTGCCAAAGCCGACCTCGGGGCACATCCTGGACTTCACTGTCGCCCTTAACTACCTTAAAG
TTTCTGGCACAGAAGGACTTTTGGGACCAAGCAACATTCAGGAGCAGCTCTGCCGTTGCACTATCAATATTCA
AGTCCCTGCATCAGGTGGAGATAAGTCACTGTGATGCTAAGCACATCAGAGGGCTGGTGCATCGAAGCCCACT
TAGCCACGCTGAGTGTCCGCTTCTCAGCAACCTCGATGAAGGAAGTCTTGTCTGAAGCCTCAGAATTTGATG
AGTGGGAGCTGAAGGCACAACCTTAGAAGGCCCTGTGACTGCCGTATCCCACTTGGCAGGCATTGACCACGC
TGGACCTGAGCCACAACAGCATCTCCGAGATCGACGAGTCTGTGAACTGATCCCAAAGATTGAGTTCCTGGACC
TGAGTCACAATGGATTGCTGGTTGTGGACAATCTGCAGCACTGTATAACCTTTGTCATCTGGACCTGTCTTACA
ACAAGCTCTCCTCCTTGGAAAGGCTTCAACCAAGCTGGGGAACATCAAGACTTTAAACCTGGCAGGCACCTTCC
TAGAGAGTCTGAGTGGCTGCACAAGCTCTACTCACTGGTCAACCTGGATCTCGGGAACAAGGATCGAACAGA
TGGAGGAGGTCGGAGCATAGGAGCGGCTCCCGTGCTGGAGCACGTGCTCTGCTGAACAACCTCTGAGCATCA
TCCCGACTACCGGCACAAGTGCTGGCTCAAGTTCGGAGAGAGGGCCCTCAGAGGTCTGTCTGGATGACACAGTA
CCACAGTAAGAAGAGCTGGACACTTGTGGAAAGTGCTGAAGCAATCAGAAAGCAAGAGGAGTCAAGTCCAACTG
GCAACCCAGAGAAGAAGGTTGGTGAAGACTCCCGGCTCTCAGCTGCCCTGCATCAGACCCAGAGCTCCCTCT
CCACTTGTGGCTCCCGCATCTGCCTCCCTGCCAGCCCTCCTCTAACCAGGAATCATGTTCTGTCAGGAGG
AGGCCCTGGCCACAGCCCTCTGCTTCCACTGACAGTCTGACTCCGAGCACAGGCCATTGCCAGGGATGTTCTG
ATTCCTTGGAGTCCATCCTCGCGGACAGGCAGCTTCCGATGATTTAAGGGACGTGCCAGGAGCTGTTGGTGGTG
CAAGCCAGAACATGCCAGCCGAGGTTCCAGGTGGTGCCGGGTCTGGCCAGATCATCTTCTGCCCTTCACTCT
GCATTGGCTACACGGCCACAATCAGGACTTCAATCCAGCGCTGAGCACACTGATCCGGCAGGCCATCGAGCGCG
AGCTGCTGCTGGATCGAGGCTGCCAACAGCGGGAGGAGGGCCAGGTTGAACAGGGCCGAGGAGGAGTGAAG
AGGAGGAAGAAGAGGAGGAGCTGGCTGAGAACCCTACTTTGAAATGGGGCCCCAGACGTGGAGGAGGAGGAGG
GAGGAGGCCAGGGGAGG
GGGCCCTGGCGCGGACAGGACTTCTGCTGGAGCACATCCGATCTCTCAGGACTTCCGATCTGCGAGTCTTCTGATTC
ATGTGACGGGAGTATCCGCCAGTTTCGCCGCTGCCCTTGTGCTCACGACTTCCGATCTGCGAGTCTCTCGAGATCC
CGCACAGGAGTCTCGGGGACAGCGAGCAGCATCTCTCTCCCTCGCGCTTTGCTCTTCTTCCGCTTCCGCTGGG
ACCTCACCGAGTTTGGCTTCTCTACGCCGAGCTGTGTCTGGTGCAAGGTCAGGACAGTGAGAACACGCTCT
TCATTATCTCGGACGCCGCCAACCCTGCACAGTTCACAGCGGACCTGCGCTCATGCTTTGCACCCCAAGCATGG
CCATGCTGTGTAGCCCATCTCTACGGCAGCCACACAGGCTCGAGGAGTCTGCTGGCCAGCTGCTCACCTTCT
ACAAAGTGGCTGGCGGCTGCCAGGAGCGCAGCCAGGGCTGCTTCCCGTCTACCTGGTCTACAGTCAAGCAAGCCGA
TGGTGCAAGCGGCCCGCGGAGTACTCAGGCAACATCAGTGGGCGAGCTGCACACTTGTTCAGCGCTGGCGG
GCTCTGCTGCGCGCCCTCTGAGGCGCTCAAGTCCGCGGCCATCCCTACTGGCTGTGCTACGCCCCAGCACC
TCAAGCTCATCAAGGCCGACTTCAACCCATGCCAACCGTGGAACCCCAACAGCTGCGCAACCGCAACAGCTTCA
AGCTCAGCCGTGTGCCGCTTCCACCGTGTGGAGCCCAACAGCAGCTGTACCCAGCTTCCGCTCCGAGAGAGCTT
CTGATGGCCACGTGCTAGAGCTGCTCGTGGGGTACCGCTTTGTCACTGCCATCTTCTGTGCTGCCCCAGAGAAGT
TCCACTTCTTGGCGCTTACAACCACTCGCGGCTCTGCTGAGGAGCTGAAGACTGTGGTCACTGCCAAGACCC
CGGGAGCGGAGG
GTCCCCAGGAGGCTCCAGCAGAGGCTTGGCCCGGCGCCAGTGGAAAGTCCAGCTCCAGCCCCGACAGGCT
CAGCTCAGGCCCCAGGAGGAGCTCCGGCCCCAGCAGAGGCTTAACTTCACTTGGCTTCCGCTCCGAGAGAGCCAG
TGGAAAGCTCAGCCCCAACCCGAGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
AGGAGATCAGATCCCCCTGCATCTGCTGCTGCCCTGCCGCTGCTGCGCAGCTGCCGAGCTGCCGAGCTGCCGAG
TCACTGAGCTTCCACAGGACTTGTGAGGTTGAAACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG
TGTTTACCAGACCCAGGCTGGAGGTGACTGCTGCTGCTGCTTCCACCAAGGCTGTGACTTTGTGCTCTC

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FIGURE 1165B

ACGACGGCCTCCGCCGTACTTCTCAGAGCCACTGCAAGGATTTCCTGGCATCAGAAAAACCCGACTACAACAACA
GCCCTTTCCACATCTCCCAGTGCTTCGTGCTAAAGCTTAGTGACCTGCAGTCAGTCAATGTGGGGCTTTTCGACC
AGCAATTCGGGTGACGGGTTCCACCCGATGCAGGTGGTCACTGCTTGACGCGGGACAGCTACCTGACGCACCT
GCTTCTCCAGCACCTCATGGTCGTGCTGCTCTCTGGAACGCACGCCCTCGCCGGAGCCTGTTGACAAGGACT
TCTACTCCGAGTTTGGGAACAAGACCACAGGGAAGATGGAGAATACGAGCTGATCCACTCTAGTCGCGTCAAGT
TTACCTACCCAGTGAGGAGGAGATTGGGGACCTGACGTTCACTGTGGCCAAAAGATGGCTGAGCCAGAGAAGG
CCCCAGCCCTCAGCATCTGTGTACGTGCAGGCCCTCCAGGTGGGCA TGCCACCCCTGGGTGCTGCAGGGGCC
CCCTGCGCCCCAAGACACTCTGTCTACCAGCTCCGAGATCTTCTCTTGGATGAGGACTGTGTCCACTACCCAC
TGCCCGAGTTTGCCAAAGAGCCGCCGACAGAGACAGGTACCGGCTGGACGATGGCCGCCGCTCGGGACCTGG
ACCGAGTGCTCATGGGTACCAGACCTACCCGACGGCCCTCACCTCGTCTTCGATGACGTGCAAGGTCATGACC
TCATGGGCAGTGTACCCCTGGACCACTTTGGGGAGGTGCCAGGTGGCCCGGCTAGAGCCAGCCAGGGCCGTGAAG
TCCAGTGGCAGGTGTTTGTCCCCAGTGCTGAGAGCAGAGAGAAGCTCATTCGCTGTTGGCTCGCCAGTGGGAGG
CCCTGTGTGGCCGTGAGCTGCCTGTGAGGCTCACC GGCTAGCCAGGCCACAGCCAGCCTGTCGTGTCCAGCCTG
ACGCCTACTGGGGCAGGGCAGCAGGCTTTTGTGTTCTTAAAAATGTTTTATCCTCCCTTTGGTACCTTAATTTG
ACTGTCTTCGCAGAGAATGTGAACATGTGTGTGTGTGTGTTAAATCTTTCTCATGTTGGGAGTGAGAATGCCGG
GCCCTCAGGGCTGTCCGTGTGCTGTCAAGCTCCCAAGGTGGTACAGCCGTGCACACCAAGTGTCTGTCTGCTG
TTGTGGGACCGTTGTTAAACAGTGCACACTGTGGGTCTGACTTTCTCTTCTACACGTCTCTTCTGAGGTGTCGAG
TCCAGTCTCTTGTGCTGTGTGCTGTGTGCTGTGTGCTGTGGCATCTTGCTGCTAATCCTGAGGCTGGTAG
CAGAATGCACATTGGAAGCTCCACCCCATATTGTCTTCAAAGTGGAGGTCTCCCTGATCCAGACAAGTGGA
GAGCCGTGGGGCAGGGGACCTGGAGCTGCCAGCACCAAGCGTGATTCCTGCTGCCGTGATTCTCTATTCCAA
AAGCAGAGTTTGACACCGCTTTAAAAA

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FIGURE 1166

MATARTFGPEREAEPKAEARVVGSELVDITYVYIIQVTDGSHWTVKHRYSDFHDHLEKLVAEKIDKNLLPPKK
IIGKNSRSLVEKREKDLLEVYLQKLLAAFPGVTPRVLAHFLHFHFEINGITAALAEELFEKGEQLLGAGEVFAIG
PLQLYAVTEQLQQGKPTCASGDAKTDLGHILDFTCRLLKLVSGTEGPFGTNSIQEQLLPFDLSIFKSLHQVEIS
HCDAKHIRGLVASKPTLATLSVRFSAATSMKEVLVPEASEFDEWEPEGTTLEGPVTAVIPITWQALITLDSLHNSIS
EIDESVKLIPKIEFLDSLHNGLLVVDNLQHLNVLVHDLDSYNKLSSLEGLHTKLGNIKTNLNAGNLLLESGLHK
LYSLVNDLDRDNRIEQMEEVRSIGSLPCLEHVSLNPLSIIPDYRTKVLAQFGERASEVCLDDIVTTEKELDTV
EVLKAIQKAEVKSLSNPEKKGGEDSRLSAAPCIRPSSSPTVAPASASLPQPILSNQGIMFVQEEALASSLSS
TDSLTPHEQP IAGGCSDSLISIPAGQAASDDLDRDVPAGVGASPEHAPEVQVVPVPGSGQIIIFLPFTCIGYTATNQ
DFIQRLSTLIRQAIERQLPAWIEAANQREEQGEQGEEDDEEEEDVAENRYFEMGPPDVEEEEGGQGEED
EEEEDEEAEEERLAEWALGADEDFLEHIRILKVLWCFLIHVQGSIRQFAACLVLTDFGIATVEIPHQESRGSS
QHILSSLRVFCPPHGDLETFGFLMPELCLVLKVRHSENTLFIISDAANLHEFHADLRSCFAPQHMAMLCSPILY
GSHTSLQEFLRQLLTFYKVAGGCQERSQGCFFVYLVYSDKRMVQTAAGDYSNGIEWASCTLCSAVRRSCCAPSEA
VKSAIPIYWLLLTPOHLNVIKADFNPMNPNRGTHNCRNRNSFKLSRVPLSTVLLDPTTRSCQPRGAFADGHVLELL
VGYRFVTAIFVLPHEKFHFLRVYNQLRASLQDLKTVVIAKTPGTGSGPQGSFADGQPAERRASNDQRPQEVPAEA
LAPAPVEVPAPAPAAASASGPAKTAPAPAEASTSALVPEETPVEAPAPPPAEAPAPQYSEHLIQTASENQIPSHL
PACPSLRHVASLRGSAIIELFHSSIAEVENEELRHLMWSSVVFYQTPGLEVTACVLLSTKAVYFVLHDGLRRYFS
EPLQDFWHQKNTDYNNSPFHSIQCFVLKLSDLQSVNVGLFDQHFRLTGSTPMQVVTCLTRDSYLTHCFLOHLMVV
LSSLERTPSPEPVDKDFYSEFGNKTGKMENYELIHSSRVKFTYPSSEEEIGDLTFTVAQKMAEPEKAPALSILLY
VQAFQVGMPPPGCCRGPLRPKLTLLTSSSEIFLLEDCCVHYPLPEFAKEPPQRDRYRLDDGRRVRDLDRVLMGYQT
YPQALTLVFDVQGHDLMGSVTLDHFGEVPGPARASQGREVQWQVFPVSAESREKLIISLARQWEALCGRELVP
ELTG

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FIGURE 1167

GGCAGGAGGAGCGTTTCGTTTGGACTTCTCGACTTGAGTGCCCGCCTCCTTCGCCGCCGCCCTCTGCAGTCTCAG
CGCAGTTATGCCCAGTTCTTCCGCTGTGGGGACACGACCAGGAGGAATCCTTGCTTCAGGGACTCGGGACCCCT
GCTGGACCCCTTCTCGGGTTTAGGGGATGTGGGGACCAGGAGAAAGTCAGGATCCCTAAGAGTCTTCCCTGCCT
GGATGGATGAGTGGCTTCTTCTCCACCTAGATTCTTCCACAGGAGCCAGCATACTTCTGGAACATGAGAGTGT
TGTTTCGCCGCTGCCATCTTATCCGAGTCCCCAGGGCCTTCTCGAGAAAGCAGGCAAAATCTCTGTTGTCTA
TGCCCAAACTGCCCAAGATGATGGAAGTTGGGGCCAAAGCCAGCCCTCGGGCATTGCTCCACTGCAGCAGTACA
CTACCAACAGATCAAGAAACCCCTCCGGCCAGTGAGAAAGACAAAATGCTAAGGCCAAGGTCCAACAGACTCC
TGATGGATCCCAGCAGAGTCCAGATGGCACACAGCTTCCGCTCTGGACACCCCTTGCCCTGCCAAGCCAGGGCAC
TGCAAGCAAAATGCCCTTTCTTGCGAGCACAGATGAATCAGAGAGGCAGCAGTGTCTTCTGCAAGCCAGTCTTGA
GCTTCAGGAGGATGTGCAGGAAATGAATGCCGTGAGGAAAAGAGTTGCTGAAACCTCAGCAGGCCCCAGTGTGGT
TAGTGTGAAAACCGATGGAGGGGATCCAGTGGACTGCTGAAGAACTTCAGGACATTATGCAAAAGCAAGACC
AGAAAGAGTGTCTCATCTTCTCAAGATAACTTGCCAAAATCTGTTTCCACTTTTCAGTATGATCGTTTCTTGA
GAAAAAAATTGATGAGAAAAAGAATGACCACCTATCGAGTTTAAAACTGTGAACCGGGCAGCACACATCTT
CCCCATGGCAGATGACTATTCAAGACTCCCTCATCACCAAAAGCAAGTGTGACGTCTGGTGCAGTAATGACTACCT
AGGAATGAGTGCACCCACGGGTGTGTGGGGCAGTTATGGACACTTTGAAACACATGTTGCTGGGGCAGGTGG
TACTAGAAATATTCTGGAAC TAGTAAATCCATGTGGACTTAGAGCGGGAGCTGGCAGACCTCCATGGGAAAAGA
TGCCGCACCTCTGTTTTCCTCGTGCTTTGTGGCCAAATGACTCAACCTCTTACCCTGGCTAAGATGATGCCAGG
CTGTGAGATTACTCTGATTCTGGGAACCATGCCTCCATGATCCAAGGATTGCAAAACGCCGAGTGCCTAAAGTA
CATCTTCCGCCCAATGATGTACGCCACCTCAGAGAACTGCTGCAAAAGATCTGACCCCTCAGTCCCCAAGATTGT
GGCATTTGAAACTGTCCATTCAATGATGGGGCGGTGTGCCACTTGAAGAGCTGTGTGATGTGGCCCATGAGTT
TGGAGCAATCACCTTCGTGATGAGGTCCACGACAGTGGGGCTTATGGGGCTCAGGGCGAGGATTTGGGGATCG
GGATGGAGTCATGCCAAAAATGGACATCATTTCTGGAACACTTGGCAAGCCCTTGGTGTGTTGGAGGGTACAT
CGCCAGCACGAGTTCTCTGATTGACACCGTACGGTCTTATGCTGCTGGCTTCATCTTACCACCTCTCTGCCACC
CATGCTGCTGGTGGAGCCCTGGAGTCTGTGCGGATCCTGAAGAGCGCTGAGGGAGCCGGTGTTCGCCGCCAGCA
CCAGCGCAACGTCAACTCATGAGACAGATGCTAATGGATGCCGGCCTCCCTGTTGTCCAATGCCACGCCACAT
CATCCCTGTGCGGGTTCAGATGCTGCTAAAAACAGAAAGTCTGTGATGAACATATGAGCAGACATAACATCTA
CGTGCAAGCAATCAATTACCTACGGTGCCCGGGGAGAGAGCTCCTACGGATTGCCCCACCCCTCACCACAC
ACCCAGATGATGAACACTCTCTTGAGAACTGTGCTAGTCACATGGAAGCAAGTGGGGCTGGAACATGAAGCCTCA
TTCTCAGCTGAGTGCAACTTCTGCAGGAGGCCACTGCATTTGAAGTGTAGTGAAGAGAGAAAGTCTTATT
CTCAGGCTTGAGCAAGTTGGTATCTGCTCAGGCCAGCAGTGCCTCAATTTTCACTTAACCCCGAGGCATT
TCATATCCAGTGGTCTTCAGAGTTGCTTTATATGTGAATTAAGTTATATTAATTTTAACTATAGTAAAAAC
ATAGTCTCGGAATAAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAGAAAAAAG

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FIGURE 1168

MESVVRRCPFILSRVQAFLOKAGKSLFYAQNCPKMMEVGAKPAPRALSTAAVHYQQIKETPPASEKDKTAKKV
QQTPDGSQQSPDGTQLPSGHPLPATSQGTASKCPFLAAQMNQRGSSVFCASLELQEDVQEMNAVRKEVAETSAG
PSVVSVKTDGGDPSGLLNQFQDIMQKQRPERVSHLLQDNLPKSVSIFQYDRFFEKKIDEKKNDHTYRVFKTVNRR
AHIFPMADDYSDSLITKKQVSVWCNDYLGMSRHRPVCAGVMDTLKQHGAGAGGTRNISGTSKFHVDLERELADD
HGKDAALLFSSCFVANDSTLFTLAKMMPGCEIYSDSGNHASMIQGIRNSRVPKYIFRHNDVSHLRELLQRSDFSV
PKIVAFETVHMDGAVCPLEELCDVAHEFGAITFVDEVHAVGLYGARGGGIGDRDGVMPKMDIISGTLGKAFGCV
GGYIASTSSSLIDIVRSYAAGFIPTTSLPPMLLAGALESVRILKSAEGRVLRQHQNRVVKLMRQMLMDAGLPVVHC
PSHIIIPVRVADAANKTEVCELMRSRHNIYVQAINYP TVPRGEELLRIAPT PHHTPQMMNYFLENLLVTWKQVGLE
LKP HSSAECNFCRRPLHFEVMSEREKSYFSGLSKLVSAQA

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FIGURE 1169

ATGCCCTACCAATATCCATTGCTGACCCCGGAGCAGAAGGAGCTGTCTGACATGACTCATCGCATCGTAGCTCTG
GGCAAGGGCATCCCGGCTGCAGATGAGTCCACTGGGAGCACTGCCAAGTGGCTGCAGTCCATTGGCACCGAGAAT
ACCGAGGAGAACCGGTGCTTCTACCGCCAGCTGTGGCTGACAGCTGACAACCGCTGAACCCCTGCATCAAGGGT
GTCATCCTCTTCCATGAGACGCTGTACCAAAGGCGGATGATGGGCGTCCCTTCCCCAAGTTATCAAATCCAAG
GGCAATGTTGTGAGCATCAAGTGTGTCAATGTCTGGCCCACTATGCCAGCATCTGCCAGCAGAATGGCATTGTG
CTTTCTACTGCCAGTATGTAACCGAGAAGGTGTGGCTGCTCTACAAGGCTCTGAGTGACCATGACATCTACCTG
GAAGGCACCTTGCTGAAGTCCAATATGGTCACCCAGGCCATGCCCTGCATCCAGAAGTTTTCTCATGAGGAGATT
GCCATGGCAACTGTCAAAAGCACTACACTCTGGGGAATAAGCGGCTAGAAGGATCACAACTGGGCCAGAACAGG
GCCACCCAGACTCATCACTGAGGCAGAGCAAGGAAGTGTCCATCAACCTCAATGCCATTAAAGTGCCCCCTC
CTGAAGCCCTGGGGCTGACCTTCTCATATAGCTGA

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FIGURE 1170

TTCCGGCGTTGTTGACCCATTTCCCGTGCTGCACCGCAGCCCTTTCTCTTCGGTTCTAGGCGCTTCGGGAGC
CGCGGCTTATGGTGCAGACATGGCCAAAGTCCAAGAACCACACCACACAACCAAGTCCCGAAAAATGGCACAGAAA
TGGTATCAAGAAACCCCGATCACAAGATACGAATCTCTTAAGGGGTGGACCCCAAGTTCTTGAGGAACATGCG
CTTTGCCAAGAAGCACAAACAAAAGGGCCTAAAGAAGATGCAGGCCAACAAATGCCAAGGCCATGAGTGCACGTGC
CGAGGCTATCAAGGCCCTCGTAAAGCCCAAGGAGGTTAAGCCCAAGATCCCAAAGGGTGTGACCCGAAGCTCGA
TCGACTTGCTTACATTGCCACCCCAAGCTTGGGAAGCGTGCTCGTGCCGTATTGCCAAGGGGCTCAGGCTGTG
CCGGCCAAAGGCCAAGGCCAAGGCCAAGGCCAAGGATCAAACCAAGGCCAGGCTGCAGCCCCAGCTTCAGTTCC
AGCTCAGGCTCCCAAACGTACCCAGGCCCTACAAAGGCTTCAGAGTAGATATCTTGCCAACATGAGGACAGAA
GGACTGGTGCACCCCCACCCCGCCCTGGGCTACCATCTGCATGGGGCTGGGGTCTCCTGTGCTATTGTGA
CAATAAACCTGAGGCAGGAAA

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FIGURE 1171

MAKSKNHTTHNQSRKWHRNGIKKPRSQRYESLGVDPKFLRNMRFAKKHKKGLKKMQANNAKAMSARAEAIKAL
VKPKEVKPKIPKGVSRKLDRLAYIAHPKLGKRARARIAKGLRLCRPKAKAKAKAKDQTKAQAAAPASVPAQAPKR
TQAPTKASE

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FIGURE 1172

GGGCGCTGAGAGGCGAGCGTGAGCCCAGCGACAGGAGAGTGAGCTCACCACGCGCAGCGCCATGACCAAGCAAGGG
TCCCGAGGAGGAGCACCCATCGGTGACGCTCTTCCGCCAGTACCTGCGTATCCGCACTGTCAGGCCCAAGCCTGA
CTATGGAGCTGCTGTGGCTTTCTTTGAGGAGACAGCCCGCCAGCTGGGCCTGGGCTGTCAAGAAAGTAGAGGTGGC
ACCTGGCTATGTGGTGACCGTGTTGACCTGGCCAGGCACCAACCCCTACACTCTCTCTCCATCTTGCTCAACTCCCA
CACGGATGTGGTGCTGTCTTCAAGGAACATTGGAGTCACGACCCCTTTGAGGCCTTCAAGGATTCTGAGGGCTA
CATCTATGCCAGGGGTGCCAGGACATGAAGTGCCTCAGCATCCAGTACCTGGAAGCTGTGAGGAGGCTGAAGGT
GGAGGGCCACCGGTTCCCCAGAACCATCCACATGACCTTTGTGCCTGATGAGGAGGTTGGGGGTACC AAGGCAT
GGAGCTGTTCGTGCAGCGGCCCTGAGTTCACGCCCTGAGGGCAGGCTTTGCCCTGGATGAGGGCATAGCCAAATCC
CACTGATGCCCTTCACTGTCTTTTATAGTGAGCGGAGTCCCTGGTGGGTGCGGGTTACCAGCACTGGGAGGCCAGG
CCATGCCCTCAGCTTCATGAGGAGACAGCAGCAGAGAAAGCTGCACAAGGTTGTAACTCCATCCTGGCATTCCG
GGAGAAGGAATGGCAGAGGCTGCAGTCAAACCCCACTGAAAGAGGGGTCCGTGACCTCCGTGAACCTGACTAA
GCTAGAGGCTGGCGTGCCCTATAACGTGATACCTGCCACCATGAGCGCCAGCTTTGACTTCCGTGTGGCACCGGA
TGTGGACTTCAAGGCTTTTGAGGAGCAGCTGCAGAGCTGGTGCCAGGCAGCTGGCGAGGGGGTCACCCTAGAGTT
TGCTCAGAAAGTGGATGCACCCCCAAGTGACACCTACTGATGACTCAAACCCCTTGTTGGGCAGCTTTTAGCCGGGT
CTGCAAGGATATGAACCTCACTCTGGAGCCTGAGATCATGCCTGCTGCCACTGACAACCGCTATATCCGCGCGGT
GGGGGTCCAGCTCTAGGCTTCTCACCCATGAACCGCACACCTGTGCTGCTGCAGACCAGATGAACGGCTGCA
TGAGGCTGTGTTCTCCGTGGGGTGGACATATATACACGCCCTGCTGCCTGCCCTTGCCAGTGTGCCTGCCCTGCC
CAGTGACAGCTGAGCCCTGGAACCTCTAAACCTTTGCCCTGGGGCTTCCATCCCAACCACTGCCAAGGACCTCC
TCTTCCCCCTTCCAAATAATAAAGTCTATGACAGGGCTGTCTCTGAAGTACTAACACAAGGACA

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FIGURE 1173

MTSKGPEEEHPSVTLFRQYLRI RTVQPKPDYGA AVAFFEETARQLGLGCQKVEVAPGYVVTVLTWPGTNP TLSSI
LLNSHTDVVPVFEKHWSHDPFEAFKDSEGYIYARGAQDMKC VSIQYLEAVRRLKVEGHRFPRTIHMTFVPDEEVG
GHQGMELFVQRPEFHALRAGFALDEGIANPTDAFTVFY SERSPNWVRVTSTGRPGHASRFMEDTAAEKLHKVVNS
ILAFREKEWQRLQSNPHLKEGSVTSVNLTKLEGGVAYNVIPATMSASFDFRVAPD VDFKAFEEQLQSWCQAAGEG
VTLEFAQKWMHPQVTP TDDSNPWAAFSRVCKDMNLTLEPEIMPAATDNRYIRAVGVFALGFSPMNRTPVLLHDH
DERLHEAVFLRGVDIYTRLLPALASVPALPSDS

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FIGURE 1174

CGCCAGCACGCGCCTGCTTCCCGTCTGCGCGAGTCCACGCAGCTCCCCAGATCAAGAAGCTGAGGCCCCAGGTTA
CACACTAAAGTAAATGGCAGAGGCAGAAATAACACCTATGTCTCTGACCCCAAGGCAITGTTCTTAAAGTTCTG
GAAACCTCTTGAGGCTTCTTGTGCTCCCTTGCGACTGCCACCCTGGGCAGGCTGTTCTGTGGCCCCATCA
TCGTGGTTTTGAACACAGGCCCTTACCAGCACAGCAGCAGCAGGCATGCGCAGCAAGCGTGGAGCAGCGCAGG
GCACCATCCAGGTGCAGGGCCAGGCCCTTCTTCCGAGAGGCCCTGCCCGCAGTGGGCAGGCTCGCTTCTCTG
TACTGTGCTGCTATGTTCTGCTTCTCTCCGAGACCTGGCAGAACCTGGGTACTGACAGGCTGGCCCCAGG
CTGGCTACCGGGCTGTGGCCATTGACCTGCCAGGTCTGGGGCACTCCAAGGAAGCAGCAGCCCTGCCCTATTG
GGGAGCTGGCCCCCTGGCAGCTTCTTGCGGCTGTGGTGGATGCCCTGGAGCTGGGGCCCCCGGTTGTGATCAGTC
CATCACTGAGTGGCATGTACTCCCTGCCCTTCCCTACGGCCCCCTGGCTCCAGCTCCCGGGCTTTGTGCCAGTGG
CCCCATCTGCACCTGACAAAATCAATGCTGCCAACTATGCCAGTGTGAAGACTCCAGCTCTGATTGTATATGGAG
ACCCAGGACCCCATGGGTCAGACCAGCTTTGAGCACCTGAAGCAGCTGCCCAACCACCGGGTCTGATCATGAAGG
GGCGGGGACCCCTGTTACCTGGACAAACCAGAGGAGTGGCATAAGGGCTGCTGGACTTCTCTCAGGGGCTCC
AGTGAAGCCAGCACTGCTGCAGGGGGTGGCTGCCCTGCTCTGAGCTCTCTTGCACGCTCTCTCTTCTC
TCCAGGCTCTGGCTCATGCACATGCAACAGGTGCGTCTGTCTATATGCTGGGTTCTTGTCTTTGTGGTCTGT
TTGTCTTTTCTACCTCTTCTCTTGAGTGATAGACTGAGGGGGTAAATCAAGAGAAAAAATCTCTCAGGAATCA
AGGAACATAATCTCTGTGGAGGTAATCCATTACATGAGCTTCTCCTGTCTTCCACTTTCTCTGCGCTTTCAC
TCCCTCCCTGCTCTGCCAGCCTTTCCCTCCCACTCTCTCTTCTGCAATGCCCTGAAGGCCAGGCCCTTA
CCCCAACACCACTTCCCCACCTCCTTAGGCCCCAGATACATATGCCACATGCACGCTTACATGTTTAGAGC
CATCCTTGTTTCCAAATATGACCTTTCGCTTGAGGGCACTGCATAGGTATACATCTAAGTCTGGACTGGCATGCAC
ATTGTCTATGTGCAGCTTTGCATATACACACATGCATACATGAGCTCCACACAAGCACTTGACACATGTGGACT
CCTAACCATGCTAACCCTCACTGGCTGGGAAGGTGGGGACCCATGGGCAGCCCTTGAGGAGGCCCTTTTGCAA
GGCTTAGGGTGTGGCCAGCCCTGAAAGCTACTTGGACACAGGTTTCAGCTGGCCCCAGCCAGAAAGTGACCCCA
GAAAGGGAGGGCCACCGCTTTGGCCCCCTGCTTTTACCTTCTCTGCGGTGCTTACACCTCAGGTTACCGGCC
TGAGGCATCTCAGCCAAGCTTGTCTGCTCTGAGGCTGTGGGGTGGGAGCCAGAGTGGAGTCCGGTGAATA
AAGTGATGCAATTAGAAAAA

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FIGURE 1175

MAASVEQREGTIQVQGQALFFREALPGSGQARFSVLLHGI RFSSETWQNLGTLHRLAQAGYRAVAIDLPLGLGHS
KEAAPAPIGELAPGSFLAAVVDALGPPVVISPSLSGMYSLPFLTAPGSQLPGFVPVAPICTDKINAANYASV
KTPALIVYGDQDPMGQTSFEHLKQLPNHRVLMKGAGHPCYLDKPEEWH TGLLDFLQGLQ

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FIGURE 1176

ATAACCCCTCATTGTTGCGAGCTGATGTCACTCGCAGTTGTGAGCGGCCGCTCTCCCGGGGACAATGTGGGACT
GAGCGGCCACGCCCGCTGCCGCCGCCGCCGCCGAGGACAGCCCCAGCGAGAGCCGGCCAGGTTGCAGCGC
GGACACACTCGCAGGTCGCTGTGGCCCCAGCCTCGCCTGACAGAAATGAGCGGCTCGGACGGGGGACTGGAGGAGG
AGCCAGAGCTCAGCATACCCCTCACGCTGCGGTGCGGATGCTGATGCACGGGAAGGAAGTGGCGAGCATCATCGGAAGA
AGGGCGAGACTGTAAAGCAATCCGGGAGCAGAGCAGTGCCCGGATCACCATCTCCGAGGGCTCCTGCCCTGAAC
GCATCACCACCATCACCGGGTCTACAGCAGCTGTCTTCATGCAGTCTCCATGATTGCTTTCAAACCTGGATGAGG
ACCTTTGTGCTGCTCTGCAAAATGGTGGAAATGTCTCCAGGCCCTCCAGTGACCTGCGCCTTGTCTATCCCTGCCA
GTCAGTGTGGCTCACTGATTGGGAAGGCTGGCACCAAGATCAAGGAGATCCGAGAGACTACGGGTGCCAGGTAC
AGGTGGCAGGGGACCTGCTCCCCAACTCCACAGAGCGAGCTGTTACGGTATCTGGGGTGCTGATGCCATCATCC
TGTGTGTGCCAGATCTGCGCTGTTATCTTGGAGTCCCCACCCAAAGGAGCCACTATCCCTTACCATCCGAGCC
TCTCCCTAGGTACTGTTCTTCTCTCTGCCAACCAGGGCTTCTCTGTCCAGGGTCAGTATGGGGCTGTGACCCAG
CTGAGGTCACCAAGCTCCAGCAGCTCTCAAGCCATGCGGTCCCCCTTTGCCACACCAGCGTGGTGCCAGGACTGG
ATCCCGGCACACAGACCAGCTCACAGGAGTCTTGGTTCCCAACGATTGATTGGCTGTGTGATCGGGCGCCAGG
GCAGCAAGATCAGCGAGATCCGGCAGATGTCAAGGGGCACATATCAAGATCGGGAACCAAGCAGAGGGCGCTGGGG
AGCGGCATGTACCATCACTGGCTCTCCGGTCTCCATCGCCCTGGCCAGTACCTCATCTGCTGTCTAGAGA
CGGCCCTGCCCCACAGCTCCCCCTGGCCTGCTGGGCACACCTATGCCATCTCCCTCTCCAACCTCATCGGCCCTCA
AGCCCATGCCCTTCTTGGCTTTACCACTGCTTCCCCAGGGCCCGCCGGGCTTGGCGGCTACACTGCCAAGA
TGGCAGCAGCTAATGGGAGCAAGAAGGCTGAGCGGCAGAAATTCTCCCCCTACTGAGGCCAGCTGAGGTACAGGC
AGGGCGAGGCAGGACCACCAGCAGGGGGGCTGCCCTGCAACCTACCCGCCCAAGGAGACTCCACCTGGGGTCCC
AAACGCCGCTAACGCCAGACGATGGATGCACCCCTACCTGCCCTCCATCTATGGGAGTCTTTCTCTCAGAG
TGGGGGCAGTTTCTGGCCAGGGGTCTGAGCTGCGGCAGCCCCAGGGCAGGGGGCCCTACCTCTCAGCTCTGTG
CTTGATACAGGGAGCAGCCAGGAGACTCCCTAGTCCCCCACCATTGGCGGGTGTCACTCAGCAGCTCCCCATCC
CTTAGGGCTTCTGGCCTACTGCATCTCTGTGGGAGTCAGGGAGGAGGGCCGTTGGGTAGCTGGGGCCAGGCTT
CTCTCCCCACCACCTGCAGATTCTTGTGCTTCCACTGATACCTTTTGACTGGAATGAAGTGGCTGGGCTTGT
CAGGGGGCACCCCAAGAGGGGGGCACTGCCAGGTAGCTGGGGGAGTGGCATGGGGCAGGGGCCAGTTCTCAGCA
GCAGACACTCTGACAGTTTTTCAATCCCTGTTTTTGAATAAATATTCTCAGCGACCACCAAAAAAAAAAAAAA
AAAAAAA

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FIGURE 1177

MSGSDGGLEEEPELSITLRLMLMHGKEVGSIIIGKKGETVKRIREQSSARITISEGSCPERITITITGSTAAVFHA
VSMIAFKLDEDLCAAPANGGNVSRPPVTLRLVIPASQCGSLIGKAGTKIKEIRETTGAQVQVAGDLLPNSTERAV
TVSGVPDAIILCVRQICAVILESPFKGATIPYHPSLSLGTVLLSANQGFVQGGYGAVTPEVTKLQQLSSHVP
FATPSVVPGLDPGTQTSSQEFLVPNDLIGCVIGRQGSKISEIRQMSGAHIKIGNQAEGAGERHVTTITGSPVSIAL
AQLYITACLETAKSTSGGTPSSAPADLPAPFSPPLTALPTAPPGLLGTPYAIISLNFGLKPMFFLALPPASPGP
PPGLAAYTAKMAAANGSKKAERQKFSFY

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FIGURE 1178

CCTCTGGAGTCCCTGTGGCAGAAGCTCAAATGGAAGGAGGAGCAGCTGCACCCAGGGGAGCAGGGGTGCACCTCCG
TTGGATAGAGCCGGCCAGGTTGCAGCGCGGACACACTCGCAGGTCGCTGTGGCCCCAGCCTCGCTGACAGAAATC

AGCGGCTCGGACGGGGGACTGGAGGAGGAGCCAGAGCTCAGCATCACCTCACGCTGCGGATGCTGATGCACGGG
AAGGAAGTGGGCAGCATCATCGGGAAGAAGGCGAGACTGTAAAGCGAATCCGGGAGCAGAGCAGTGCCCGGATC
ACCATCTCCGAGGGCTCCTGCCCTGAACGCATCACCACCATACCGGGTCTACAGCAGCTGTCTTCCATGCAGTC
TCCATGATTGCTTTCAAAGTGGATGAGGACCTTTGTGCTGCTCCTGCAAATGGTGAAATGTCCTCAGGCTCCCA
GTGACCTCGGCCCTTGTCATCCCTGCCAGTCAGTGTGGCTCACTGATTGGGAAGGCTGGCACCAGATCAAGGAG
ATCCGAGAGACTACGGGTGCCAGGTACAGGTGGCAGGGGACCTGCTCCCAACTCCACAGAGCGAGCTGTTACG
GTATCTGGGGTGCCTGATGCCATCATCTGTGTGCGCCAGATCTGCGCTGTTATCTCGGAGTCCCCACCCAAA
GGAGCCACTATCCCTACCATCCGAGCCTCTCCCTAGGTACTGTTCTTCTCTCTGCAAACAGGGCTTCTCTGTC
CAGGGTCAGTATGGGGCTGTGACCCAGCTGAGGTACCAAGCTCCAGCAGCTCTCAAGCCATGGGCTCCCTTT
GCCACACCCAGCGTGGTGCCAGGACTGGATCCCGGCACACAGACCAGCTCACAGGAGTCTTGGTTCACCAAGAT
TTGATTGGCTGTGTATCGGGCGCCAGGGCAGCAAGATCAGCGAGATCCGGCAGATGTCAGGGGCACATATCAAG
ATCGGGAACCAAGCAGAGGGCGCTGGGGAGCGGCATGTCACCATCACTGGCTCTCCGGTCTCCATCGCCCTGGCC
CAGTACCTCATCACTGCCTGTCTAGAGACGGCCAAGTCTACCTCTGGGGGAGCGCCAGCTCGGCCCGCCGACAG
CTGCTTGGCCCCCTTCTCGCCACCCCTGACGGCCCTGCCACAGCTCCCCCTGGCCTGCTGGGCACACCTATGTC
ATCTCCCTCTCCAACCTTATCGGCCCTCAAGCCATGCCCTTCTTGGCTTTACCACTGCTTCCCCAGGGCCCGG
CCGGGCTTGGCGGCTTACACTGCCAAGATGGCAGCAGCTAATGGGAGCAAGAAGGCTGAGCGGCAGAAATTCCTCC
CCCTACTGAGGCCAGCTGAGGTACAGGCAGGGGACAGGCAGGACCACAGCAGGGGGCTGCCTCTGCACCCCTACCC
GCCAAGGAGACTCCACCTGGGGTCCCAAACGCCGCTAACGCCAGACGCATGATGCAACCCCTACCTTGCCT
CCATCTATGGGAGTTCTTTCTCTCAGAGTGGGGCAGTTTCTGGCCAGGGGCTGAGCTGCGGCAGCCCCAGGG
CAGGGGGCCCTACCTCCTCAGCTCTGTGCTTGATACAGGGAGCAGCCAGGAGACTCCCTAGTGCCCCACCATG
GCGGGTGTCACCTACGCACCTCCCCATCCCTTAGGGCTTCTGGCCTACTGCATCCTTGTGGGAGTCAGGGAGGAG
GGCCCGTTGGGTAGCTGGGGCCAGGCTTCTCTCCCAACCACTGCAGATTCTTGTGCTTCCACTGATACCCCT
TTGACTGGAATGAAGTGGCTGGGCTTGTGAGGGGACACCCAAAGAGGGGGGACTGCCAGGTAGCTGGGGGAGTG
GCATGGGGCAGGGGCCAGTTCCTGACGACGAGACACTCTGTACAGTTTTTCAATCCCTGTTTTGAATAAATAT
TCTCAGCGACCA

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FIGURE 1179

MSGSDGGLEEPELSITLLRLMLMHGKEVGSIIIGKKGETVKRIREQSSARITISEGSCPERITITITGSTAAVFHA
VSMIAFKLDEDLCAAPANGGNVSRPPVTLRLVIPASQCGSLIGKAGTKIKEIRETTGAQVQVAGDLLPNSTERAV
TVSGVPDAIILCVRQICAVILESPPKGATIPYHPSLSLGTVLLSANQGFVSQGGYGAVTPAEVTKLQQLSSHVP
FATPSVVPGLDPGTQTSSQEFVLPNDLIGCVIGRQGSKISEIRQMSGAHIKIGNQAEGAGERHVTITGSPVSI
ALAQYLITACLETAKSTSGGIPSSAPADLPAPFSPPLTALPTAPPGLLGTPYAIISLNFIGLKPMPFLALPPASPGP
PPGLAAYTAKMAAANGSKKAERQKFSPY

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FIGURE 1180

ATTCTTTTAGTGTCTCAGGGTAAGGGAAAGGCTAGGTACCTACCATGTATGTGCTTATTGTTTTAATTCATC
ACTCTTTGGAGATGGGAATTTGTATCCCCTTCTACAGATGGAGAAGCTGAGGCTCAGAGGGTTGAATGGGCTCCC
CAGGCTTACACAGCTCTGTGAGACACACATAAGCACCTGGTCAGAGTGATGTGGCGCTCAAGGTCCTATGCAGT
CTCTTTCTCTGGGAGTTTGACTAGCCAGCTCTGGGGTCCCCATGTAAAGGCGAGGGCAGGGTGGACTGGGCTC
CTCTCGAACCCTCTTTGGCTGCCCCAGCGAGAGCCGGCCAGGTTGCAGCGCGGACACACTCGCAGGTGCGTGTG
GCCCCAGCCTCGCCTGACAGAATGAGCGGCTCGGACGGGGGACTGGAGGAGGAGCCAGACTCAACATCACCTC
ACGCTGCGGATGCTGATGCACGGGAAGGAAGTGGGCAGCATCATCGGGAAGAGGGCGAGACTGTAAAGCGAATC
CGGGAGCAGGTGAGGATGGAGTTTGGGGGAGGAGCCAGGGCAGCTGATGTGGAGGGGAGATCCCTGCCCCACTT
TCTCTGAAACCACTCCTCTCTGGGCTGACCAGTGAGTCCCCAGAGGGTGGCAGTTTTGAGCCTTGCCTCAGGCC
TGGTGAGTGGGGCAGGCAGACAAGTTCCGGCAAGGAGCAGGGAAGATGCCCCGTGCCCGGCGCTCATTTCTATA
TCTGCAGAGCAGTGCCCGGATCACCATCTCCGAGGGCTCCTGCCCTGAACGCATCACCACCATCACC GGGTCTAC
AGCAGCTGTCTTCCATGCAGTCTCCATGATTGCTTTCAAATGGATGAGGACCTTTGTGCTGCTCCTGCAATGG
TGGAAATGTCTCCAGGCCTCCAGTGACCTTGGCCTTGTCATCCTGCCAGTCACTGTGGCTCACTGATTGGGAA
GGCTGGCACCAAGATCAAGGAGATCCGAGAGGTGAGGGGCGAGATATACCACCCACAGGGAATCCGGGGCAGGG
AGCAGTTGTAAAGAGGGGTGTGGGCTTATGGCTCTCTCCCACTAGAGAGCTCTGAGCCTGGGCAGCCCTTTTC
TGGGTTATGGGACAGCCAGAAGTGGCCCTGTTCTCTGTTTGACAGACTACGGGTGCCAGGTACAGTGGCAGC
GGACCTGCTCCCCAACTCCACAGAGCGAGCTGTTACGGTATCTGGGGTGCTGATGCCATCATCTGTGTGTGCG
CCAGATCTGCGCTGTTATCTCTGGAGTCCCAACCCAAAGGAGCCACTATCCCCACCATCCGAGCCTCTCCGTAGG
TACTGTTCTCTCTCTGCCAACAGGGCTTCTGTGCCAGGGTCAGTATGGGGCTGTGACCCAGCTGAGGTAC
CAAGCTCCACAGCTCTCAAGCCATGCGGTCCCTTTGCCACACCCAGCGTGGTGCCAGGACTGGATCCGGGCAC
ACAGACCAGCTCCACAGGAGTTCTTGTTTCCCAACGATTTGATTGGCTGTGTGATCGGGCCAGGGCAGCAAGAT
CAGCGAGATCCGGCAGATGTACAGGGCACATATCAAGATCGGGAACCAAGCAGAGGGCGCTGGGGAGCGGCATGT
ACCATCACTGGCTCTCGGCTCTCCATCGCCCTGGCCAGTACCTCATCACTGCCTGTCTAGAGACGGCCAACTG
TACCTCTGGGGGACGCCAGCTCGGCCCGCCAGACCTGCTGCCCCCTTCTCGCCACCCCTGAGCGCCCTGCC
CACAGCTCCCCCTGGCTGTCTGGGCACCCATATGCCATCTCCTCTCCAACCTTATCGGCCCAAGCCCATGCC
CTTCTTGCTTTTACCACCTGCTTCCCCAGGGCCGCGCGGGCTTGGCGGCTACATGCCAAGATGGCAGCAGC
TAATGGGACGAAGAAGGCTGAGCGGCAGAAATCTCCCCCTACTGAGGGCAGCTGAGGTACAGGCAGGGGCGAGC
AGGACCAACAGCAGGGGGCTGCTCTGCACCTACCCGCCCAAGGAGACTCCACCTGGGGTCCCAACGCCGCT
AAGCGCCAGACGCATGGATGACCCCTACCTGCTCTCATATGAGGAGTTCTTTCTCTCAGAGTGGGGCAGT
TTCTGGCCAGGGGTCTGAGCTGCGGCAGCCCAAGGGCAGGGGCGCTTACCTCTCAGCTCTGTGCTTGGATACA
GGGAGCAGCCAGGAGACTCCCTAGTGCCCCCACCATTGGCGGGTGTCACACAGCACTCCCATCCCTTAGGGCTT
CCTGGCCTACTGCATCTTGTGGGAGTCAAGGAGGAGGGCCGTTGGGTAGCTGGGGCCAGGCTTCTCTCCCCAC
CACCTGCAGATTTCTGTGCTTCACTGATACCTTTTGACTGGAATGAATGGCTGGCTTGTGAGGGGGCAC
CCCAAGAGGGGGCACTGCCAGGTAGCTGGGGAGTGGCATGGGCGAGGGGCGAGTTCTTCAGCAGCAGACATCT
TGTAAGCTTTTTTCAATCCCTGTTTTTGAATAAATATTCTCAGCGACCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1181

MPRCPALILYLQSSARITISEGSCPERITTTITGSTAAVFHAVSMIAFKLDEDLCAAPANGGNVSRPPVTLRLVIP
ASQCGSLIGKAGTKIKEIREVRGEIYHPQIRGKGAVVRGVLGLWRPPHLESSEFGQPFSSGLWEQPEVAPVLCLO
TTGAQVQVAGDLLPNSTERAVTVSGVPDAIILCVRQICAVILESPPKGATIPYHPSLSLGTVLLSANQGFSVQGG
YGAVTPAEVIKQLQLSSHAVPFATPSVVPGLDPGTQTSSQEFVLPNDLIGCVIGRQGSKISEIRQMSGAHKIGN
QAEGAGERHVTITGSPVSIALAQYLITACLETAKSTSGGTPSSAPADLPAPFSPFLTALETPAPPGLLGTPTYAISL
SNFIGLKPMFFLALPPASPGPPPLAAYTAKMAAANGSKKAERQKFSFY

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FIGURE 1182

GAATTCCGCCGCTGCTACACGCCTGGTGGGCAGCATGTCGGCAACAGCGGCTGCTCGTAAGCGGGAAAGCGGGC
CTCTGGGGCCGGGGCTGGCGCGGGGCCGGCAAGCGGCGGCGAAAGGCCGACTCTGCGGGGACAGGGGCAATC
CAAGGGTGGCGGCAAGATGAATGAGGAGATCTCCAGCGACTCTGAGAGCGAGAGCCTAGCTCCAAGGAAGCCTGA
GGAGGAGGAGGAGGAGGAGCTGGAGGAACTGCACAGGAAAGAAGCTGCGCTTGGCCAAGCTCTACCTAGAGCA
GCTCCGTCAGCAAGAGGAGGAGAGGCTGAGGCCCTGCATTTGAGGAGGACCAGGTGGCGGGGCGCCTGAAGGA
GGATGTGCTTGAGCAGAGGGGCGAGCTGCAGAAGTTGGTGGCAAAAGAGATCCAGGGCCCAGCCTCAGCTGACAT
TCGCGTTTTACGGGGGACCAAGCTCTCTATCACATGTTTGGTCTGCACCCCCGATGACTCAGCCATCTTCTCTGC
TGCCAAAGACTGCAGCATCATTAAGTGAGCGTGGAGAGTGGACGGAAGCTGCATGTGATTCCTCGAGCCAAGAA
GGGTGCCGAGGGAAGCCCCCTGGCCACAGCAGCCACGTCTCTGCATGGCCATCTCCTCCGACGGCAAGTAGCT
TGCCCTCTGGTGACCGCAGCAAGCTCATTTCTATTGGGAGGCCAGAGCTGCCAGCAGCTTGACACCTTACAGG
ACACCGGGATGCAGTGTCGGGTCTGGCATTCCGCAGAGGCACCCACCAGCTCTACAGCACATCCACGATCGCTC
CGTGAAGGTGTGGAATGTGGCAGAGAATCCTACGTGGAGACGCTCTTCGGACACCAGGACGCTGTGGCTGCACT
GGATGCCCTTGAGCCGGGAGTGCTGTGTGACGGCTGGGGGCCGGGATGGGACTGTACGTGTGTGGAAGATCCCCGA
GGAGTCCCAGCTTGTCTTCTATGGCCACCAGGGCTCCATCGACTGCATCCACCTAATCAATGAGGAGCACATGGT
GTCCGGCGCGGACGATGGCTCTGTGGCCTTGTGGGGTCTCTCCAAGAAGCGACCCTTGCCCTGCAGCGTGAAGC
TCACGGGCTGCGGGGAGAGCCAGGCCCTGGAGCAGCCCTTCTGGATATCGTCGGTGGCAGCCCTCTCAACACAGA
CCTTGTGGCCACAGGCTCCACAGCTCCTGTGTGCGGCTTTGGCAGTGTGGGGAAGGCTTCCGGCAGCTTGACCT
TCTCTGTGACATCCCCCTGGTGGGTTTTATCAACAGCCTCAAGTTCTCCAGCTCTGGGACTTCCTGGTGGCTGG
GGTAGGGCAGGAGCAGGCTTGGCCGATGGTGGAGAATCAAAGAGGCTCGGAATCTGTCTGCATCATCCCACT
CCGCAGGGTCCCTGTACCCCCAGCTGCTGGTTCCTGACACTCTTATCTCTCTTATTAAAGTCCTTCCAGGCTAT
GCCCCACCCTCTTTGAAGCTT

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FIGURE 1183

MSATAAARKRGKPPASGAGAGAGAGKRRRKADSAGDRGKSKGGGKMNEEISSDSESESLAPRKPEEEEEEELEETA
QEKKLRLLAKLYLEQLRQEEEEKAEARAFEDQVAGRLKEDVLEQRGRLQKLVAKEIQAPASADIRVLRGHQLSIT
CLVVTPDDSAIFSAAKDCSIKWSVESGRKLHVIPRAKKGAEKPPGHSSHVLCMAISSDGKYLASGDRSKLILI
WEAQSCQHLYTFTGHRDAVSGLAFRRGTHQLYSTSHDRSVKVVWVAENSYVETLFGHQDAVAALDALRECCVTA
GGRDGTVRVWVKIPEESQLVFYGHQGSIDCIHLINEEHVMVSGADDGSVALWGLSKKRPLALQREAHGLRGEFGLAQ
PFWISSVAALLNTDLVATGSHSSCVRLWQCCEGFRQLDLLCDIPLVGFINSLKFISSSGDFLVAGVGQEHRLGRWW
RIKEARNVSCIPLRRVPVPPAAGS

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FIGURE 1184A

GCAGCTTAGGCGCCACCAAGGCAAGAACCTAGCCTCCGAGGAGCCCCAAAAGAAGAGAGCTCAGAAGCCCTCCCA
CATGAGAAGAAACATACGAAGAGCTACTCCGGGAGGAGTCATTTGGAGGCTGTATACCAAAGCAGCAGCAAGAAAGA
GTTGGAAGAAGGAAGCGCTGGAGCAGCAGAGGAAAGATTATGCAGCCCTATTCCTACTGTTCCGCTGGAGTT
CCTCCCTGAGGAAATTGCTTTAAAGGGCAAGTGACGGTCCCAACTGCCTCCTCGGGTCTTGCCCCAGGAAGTCAT
TTGTTTGGACAGATGACAGTGGCAGTGAGGATGAAAAGAGCAGTCGAGATGAGGTGATTGAAGTGAAGCTCTGGAGA
GGAGGACACTCTGCACATCTTGGACAGCAGTGAACTGTGCAGTGAAGATGATGAGGAAGAAGAGAGGGTGGCAG
CCATGTCAATGATGTCTTAAACCAAGCGTGACGCCCTTGGGCGGGTCTTGTCAACCTAAACCAACCTCCAGAGGA
GGAAAATGTCTTCTTGCCTCCACAGTTGGCAGCGGGCTGTGAAACCTCATCAGATTGGCGGGATCCGGTTCCTTTA
CGATAACCTAGTGGAGTCTCTGGAGAGGTTTAAAGCAGCAGTGGCTTTGGCTGTATTCTTGGCCCAAGCAGATGGG
CTCTGGGAAAACCTTGAAGATGATCTCTTTTATCGACGTCCTCTTCCGCCACACGCCAGCCAAAACAGTCTTGGC
CATTTGTGCGGGTAAATACCTTTCAGAAATTGGCTGGCAGAGTTCAACATGTGGCTTCCACCTCTGAAGCCCTCC
GGCTGACAAACAGCTTGAAGAGTCCAGCCTCGGTTCTTAAAGTTCACATCTTGAATGATGAGCACAAGACGAT
GGCATCTCGTGCTAAAGTGTAGGCTGATTTGGGTGTGAGAGGGTGGCGTGCTGTGATGGGGTACGAGATGTACAG
ACTCCTCAGCTCTGAAGAAATCATTTGACACAGGTAGACCAAGAAAACCAAGAAGCGTTCTCACCCAGTCATCAT
TGATCTAGATGAGGAAGATCGGCAGCAGAGATTTCGGAGAGAGTTTGAAGAGCTTTATGCCCGCTTGGCCCTGA
TGTAGTAATCTGTGATGAGGGACCCGATCAAAAACGCCAGCCAGCACCCTACAGGCTCTGAAGATTCATCGC
CTCTCGCCCGCGGTGGTGCTGATCTGGGTACCCCTGTGCAAAACCAACCTCATTGAGTACTGGTGCATGGTGAACCT
TGTGCGCCACAGACTTCTTGGCACCAGCGGAGGAGTTTCAACACATGTTTGAAGCCCTTATCTGAAATGGGCAATG
TATTGACAGCACCCTCAGGACGCTCGCCCTCATGCGGTACCGGAGCCATGCTCTGCACAGTCTTCTGGAAGGCGCT
TGTGACAGAGGAGAGGCCACACTGTGCTGAAGATTCATCTCCCTGCCAAGGAAGAAAATGTGATCCTTGTGCGGCT
CTCCAAAGTCCAGCGAGATTGTATACACAGTTTCAATGGAATCGCTTCCGGGAGTCTGGGTAGCAGCGGTTGGCTGGG
GCTGAACCCCTTAAGGCATCTGTGTGTTGTTGCAAGATCTGGAATCACCCTGATGTGCTGTATGAAGCCCTTCA
GAAGGAGAGCTTGGCCAATGAGCAGGACCTAGACGTGGAAGAAGTGGCTCTGCAGGGACAGGTCGCCGCTGTCC
ACACAGGGAACAAAAGGCAAGGAGGATAGCACCTTGGCTTCTCATGGGAGGCGCAACCAATGACAAATT
CCTACAGGGCGTTGGCTTCAACCTTTCCAGGAGCGAGGCAACCAATTGTACATATGAATGGGCCAAGGACCT
TCTGACTAATACAGACTGTGAGTCTTAGAAAACCTCTCCCAAGATGGTACTGCTTTTCCACCTGATTGAGGAAG
TGTGAAGCTTGGGGACAAGATCCTTGTGTTTAGCCAGAGTCTTCCACCTTGGCTCTCATCGAGGAATTCCTTGG
AAAACGAGAAGTACCCTGTCCACCTGGTACCAGGGGCAAGGAGCACAAGAGTGGGTTGCAAAACATCAGCTACTT
CCGGCTAGATGGTAGCACCCTGCTCTTGAAGGGAGCGGCTTATTAACTAGTTCAATGATCCAGCAACCTCAC
CACTTGGCTGTCTCTTCTCTCAAGGGCCGGATGCTTGGGTGTAATCTGATTGGTGCCAAACCGAGTGGTGT
GTTTGTAGCTTCTTGTGAACCTTGCCATGATGCCAGGCGAGTATGTGCGGTATACCGTTATGGCCAGAAAAGCC
CTGTATACATCTATCGCTTGTGGCTGATTACATCTAGAAAAGAAGATCTATGACCGCTCAGATTCTCAAGAGGG
CATGTCAAGTCCGGTGGTGGATGATCTAAATCAATGCTGAACTTCACAGGAAAGAGGTGGAAGAACTTATGCA
CTTTGTTGAGAAGGAGCCAGCTCCCCAAGTTTCTTGAACGTAAAGGGATCAAGGAGTCAAGTCTTGAACCTTGGC
CTGTCTGAAGTACCCCTACCTTCAACCAAGGAGCCTTTCGAGCATGAGTCAATTGCTCTTGAACCGAAAGGATCA
CAAGCTTAACCAAGGCTGAGAAAAGAGCAGCAAGAAAAGCTATGAGGAAGACAAACGCACATCAGTCCCCATATAC
CGCCCATCTGATTCGCGAGTATTCCTTGCACGGCATCAGAGCCTGACCAAGCTCCCGCTTCTCAGCCAGAGAAA
CTGGCAGCCAACTTTGAAGGGTGTATGAAAAGCCTGTGGCCAGTGTTCGTCTGTGCAATCCACCCCCATCCCCAT
GATGCCCCCGCATGTCTCCATTGGGAGGAAGTGAAGCTCTGCCTCCAGCAACAATCATCAATGAATTTCCCAT
AACTACTTTGACGCTGCTGCCGGAATCCGTGACAGAGTGTGTCACCAAGCAAGATATTGTTATTCTTGGACTCAA
CAGCTTCCACAGATGTACAGGCAAGAAATTAATGCTGGTGAGAGCATCCACATCATCCGTGGGACAAAAGGGACGTA
CATCTGTAACAGTGTGACCGGATCTTTGCTGTCCGGGCACTTGGCAAAACCAAGGTTCTTGAAGATGTGTGGAT
GGCTGCCTCAGGTTCCAGGGACCTTCTTCCGAGTCCACAAGCAACGGCAGACACATGCTCATACCCCAAGC
CCCCAGCCTGAGGGGCTGGCCAGGGCCGCTCTCTCTGACAGCCAGAGATCATCAGTGAAGTCTCAGCAGTATGC
AGATGTGGCTGCTGCCCGGGAATCCGTGACAGAGTCTCCCAAGCACCCTGCGCCCTGCTTGGCCCCCGGGCCA
ACTTATCCAGCAGCAGTGTGTTTCCCGGGACAGCTCTCGGAACCTGAGCCTCGACTTGGGGGTTCAATGCTCAATAG
TTCCCTCTTGGTGTGCTGCGCCAGCCTGTGGTGAACGGCAGCAAGTGTGAGTTAAGGGGCCACAAGCCGAAGTT
GGCCACACCACTGCTGCCAGGAGTATCCCGCCGGCGGTCCAGGAAGGGTATCTGCCAGCCCCGTGACGCC

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FIGURE 1184B

GTATGAACACGGGTATCCAGTCTCTGGCGGGTTTGCCATGCCACCCGTCTCCTTAAACCATAACCTCACCACCCC
CTTCACCTCCCAGGCTGGGGAGAACTCCCTGTTTATGGGCAGTACCCCTCCTACTACCAGCTGTCCAATTGCT
GGCAGATGCCCGCTGGTGTTCAGTGACTACTGACCCCTCTGGTGCCAGCAGGCCCCGTCAAGTTCCCTTCCAC
GGCTACCTCAGTCACTGCCAGCAACCCCTCCTTCATGCTCAACCCCTCTGTGCCAGGGATACTACCCAGCTATTC
ACTCCCATTTCTCACAGCCACTCCTGTCCGAGCCGAGGATGTTTGCGCCTTTTCCTTCCCCTGTCTTGCCAGCAA
CCTTTTCGCGGGGCATGCTATCTATCCAGGCTACATGTCCACATGCAGGCTACCCAGCTGGTGGCCTCCTACG
GTCCCAGGTGCCATTTGACTCTCATGAGGTGCGGAGGTTGGGTTCAAGCTCCAATGATGATGAGGATAAAGA
CGATGATGTGATAGAGGTCACTGGGAAATAGCTAGGGAGCCCTCCCACTCACTTGGGGCCCCAGCAGGTTG
CCCAACAGCTGAAAGGCAGTGATTTAGACCTTTTGAGAATAGGACACTTGGCAGGAGGAAAAGGAAGAGGACA
AAGGAGGGTGGTTGGCAAAGTGGCAGAGCTCTGTTGCTGTTTAAACAAAAGAGGC

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FIGURE 1185

MRRNIRKLLREDQLEPVTKAAQQEELERRKRLEQQRKDYAAPITVPLEFLPEEIALRASDGPQLPPRVLAQEV
CLDSSSGSEDEKSSRDEVIELSSGEEDTLHIVDSSESVEDEEEEGGTHVNDVLNQRDALGRVLVNLNHPPEE
ENVFLAPQLARAVKPHQIGGIRFLYDNLVESLERFKTSSGFGCILAHSMLGKTLQVIFIDVLFRHTPAKTVLA
IVPVNTLQNLAEFNMWLPPPEALPADNKPEEVQPRFFKVHILNDEHKTMSRAKVMADWVSEGGVLLMGYEMYR
LLTLKKSFAIGRPPKTKKRSHPIIDLEEDRQQEFRREFEKALCRPGPDVVICDEGHRIKNCQASTSQALKNIR
SRRRVVLTGYPLQNNLIEYWCMDVFRPDLGTRQEFSSNMFERPILNGQCIDSTPDVRLMRYRSHVLHSLLEGF
VQRRGHTVLKIHLPKEENVILVRLSKIQRDLYTQFMDRFRDCGSSGWLGLNPLKAFVCCKIWNHPDVLYEALQ
KESLANEQDLDOVEELSGAGTSARCPQGKTKGKEDSTLASSMGEATNSKFLQGVGFNPFQERGNINIVYEWAKDL
LTNYQTGVLENSPKMVLFLHLIEESVKLGDKILVFSQSLSTLALIEEFLGKREVPFPGTEGQGAQKWVRNISYF
RLDGSTPAFERERLINQFNDPSNLTTLWFLSTTRAGCLGVNLIGANRVVVFASWNPCHDAQVCRVRYRGQKKP
CYIYRLVADYTLKKIYDRQISKQGMDSRVVDDLNPMLNFTRKEVENLLHFVEKEPAPQVSLNVKGIKESVLQLA
CLKYPHLITKEPFEHESLLNRKDHKLTKAEKKAAKKSYEEDKRTSVPYTRPSYAQYYPASDQSLTIPAFSQRN
WQPTLKGDKEPVASVRPVQSTPIPMMPRHVPLGGSVSSASTNPSMNFPIYLQRAQVLQKVVTITDIVIPGLN
SSTDVQARINAGESIHIRGKTGYIRTSDGRIFAVRATGKPKVPEDGRMAASGSGQGPSCESTSNGRHSASSPKA
PDPEGLARPVSPDSPEIIELEQYADVAARESRSQSPSTNAALPGPPAQLMDSSAVPGTALGTEPRLGHCILNS
SLLVGTGQPCGDRHPVLDLGRGKRKLATPPAAQESSRRRSRKGHLPAPVQPYEHGYPVSGGFAMPPVSLNHNLTTP
FTSQAGENSFLMGSTPSYQLSNLLADARLVFVTITDPLVPAGPVSSSSSTATSVTASNPSFMLNPSPVGILPSYS
LPFSQPLLEPRMFAPFSPVLPSPNLSRGMISYIPGYMSPHAGYPAGGLLRSQVPFPDSHEVAEVEGSSNDDDEDK
DDVIEVTGK

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FIGURE 1186

GCCACCGCGCGCCGAGTCTTTTGTCCAAGATGGCGGCGCGGGGCGCTGCCTCTCGGCCGCCGCTCCGCC
GCCGCCGCTGTGAGAAACCTACGGGCGCGCGCGCGCGCGCAGCGCCATGAAGCGGACAGCGAGCGAGACTC
TAGCCCGAGCGGGCGCGGCTCTCATCTGCTCCGCCAAGCGTCCGCGGAGCGCAACGGAGCGCGGAGCGCGCGG
CGCGCGGGGCGGCACAAAGGCTCTGGCGGCGCCAAGCACCCTGTTCCAGCGCGGGCCCGCGCAAAACCCCGCGG
CAGCGGAAGCGCGCGGGGCGGGCATCGCAGCGCGCGCGGACCGGAGACGCGAATACCGCGCGAGTAGCGGGCGG
CTCTCTCGGCTCCGGCGCTGGCGCGGGGGACGCGCGGCAAGGCTCTCGGGGGACCGCGGCGCTCCGGCATGTC
GCCCGCGCGCTCTCTCTGCGCGCGCTCCGCCACCGCTGGGGCGGAGCCCGCTGTCTCCGCTCATCCGCGCG
CGCGCTGTAGTACAAGAGTGTGCTCATCAGCAGCTTGAGCCCCGCGCTGCCCGCGGAGCAGCTCGAGGACCGGT
CTTCCACAGTTCAAGCGCTTCGGCGAGATCAGCTCCGCTGTGCGACACGCTGAGCTGGGCGGTGTGGCTA
CGTGAATTCGCGCACCCACAGGACGACGCGAGGCGCGGACGACGCTGGCCCGGAGCTGCTGTCTACGA
CGCGCGCTCAAGGTAGAGCCCGTGTACCTGCTGGCGCGCGGAGCAGTCCGCGAAGTAGCAGCAGCAGCGC
CGCGCTTCCACGCTCCCCAGGGCG
CCAGTACAAGCAGCGCTCGCTGTCCCCGCTGCTGCCCGCGCGCTGGGGAGCGCCCGTGGCCGTACGCGCGCG
AGCCTTCGCGCTGGATGCCGTGCTGCCGCGCGCTGGGACTGTCCGCGGAGCGGGCGCTGGACTACTACGGGCT
GTACGACGACCGTGGCGCGCTTATGGCTACCCAGCTGTGTGTGAGGAGGACTGATGCCCGAGGATACCCAGCG
GGCCACGCGCAACCTCTTATGGTAACTGGACACAGCGTATCTGAGGTGAGCTCGAAGGGCTTCAGAA
ATATGGCATCATGAGGAGGTGTGCTATCAAGAGGCTGCCGTGGCCAGGCGGTGCTATGGCTCTCTCAAGTT
CCAGAACCTGGACATGGCCCATAGGGCTTAAGTGGCCATGTGCGGCCGAGTGATTGGTGCACCCCCATTAAAT
AGGCTATGGCAAGGCCAACCCACCACTGCTCTGGGTGGGTGGCTGGGACCTAACACGTCACTGGCGGCTCT
GGCGCGAGAGTTTGACCGCTTTGGGAGCATTGGACCATGTATCAGCTCAAAGGAGATAGCTTTGCTATATTTCA
GTACGAGAGCTTGAGCGCAGCCAGGCGCGCTGTGCTAAATGAGGGGTTTTCCCTTGGGTGACCGAGCCGAG
GCTCCGCGTGGATTGTGCCAAGCAGAGGAGACTCGGTACCCCCAGCAGTACCAGCCTCGCCATCTCTGTGCA
TTATGAGCTGCTCACAGATGGATACACCGCGCACCACCACTTGAGCGCGGACTGGTGGCGGACGAGCGCCCC
ACACCTTCTGTACTCAGACCGAGACCGGACTTTTTTGGAAAGGGGACTGGACAGCCCAAGTAAAAGCTCTGACCG
CCGAAACAGCCTTGAGGGCTACAGTGCCTCAGTGCGCAGCGCGAGTGGTGAGCGTTGGGGGCGAGATGGAGACCG
TGGTTTGCCCAAGCCCTGGGAAGAGAGGCGGAAACCGGAGAAGCCTTTCCAGTGACCGTGGGAGCAACCCATT
ACCATATGAGGAACGGAGTAGGACCAAGGGCAGTGGGACGAGTCAGAGCGGGCTCCGACCGCACCCCTGAGCG
CAGCGCGAAGGAGAACCACTCCAGTGAAGGGACCAAGGAGTCCAGCAGCAACTCCCTCAGCAACAGCAGCATGG
GGCTGAGGAACGGGGCCACCAACACACACAGGCTGCAGACTTCTCCACGGGAAGGAGGCAAGAGACAG
CAGAGCGCAATCACCGGACCACAGAGGCGGAGCCCAAGCCTCTGGAAGAGCCAAACACGAGACCAAAAGCTGAA
GAATCTTTCAGATACGCTCAGACACTACAGCTGGGTGGAAATGGGCTCTGTGTTGAAACACACTTCTGGGAGCAA
CAGCTTTTCCAGTACCTAGAGGGGGACAGGGGGTGATCAGCATCTCCCTAAAGACCACACTTCTGGGAGCAA
GCTGACCCAGCTGAAATCGCCCAAGCGCTTCGACTGGACAGCCCAAGCTGAGCAGGTCACACGACATCAA
GCGGGGAGCCCCAACCGCTATGCGGTCTCTTAGCCACCGGCAACCCCAAGTGGGCTGGCACTGAGGCGGG
GCCACAGTAGAGCCCGCTCTGACAGGCGCGCTTCTCAGGAACCTGGTCTCTACTTGAACAGAGCAGCGCCG
AGGGGTGATAGCTTGCCAGTGGGGGGTCCAAAGGGCAGAGCGGACAGGCATGCTCTACGCTTCCACCCGTG
CGACTTTTCCAGCAGTACCTCCAGTCAGCAGCTAAGGACATGGGCAAGCTAGAAGAGAACACATGGTGATAGT
CATCTGTCAGAGACACTGCCTAGCCCAAGCTGCTTTCCAGCGCTCATGTTGTGTCAAAAGCAATATTTTA
AAATCTGATCCCCCTCTACCTACCCTTTGGTTGAATATCTCTGGGTATTTTGGTTCAATTTGGGTGGG
ACAAAGCTGTGCCACCAACCAACTAAGTTCTTAGATTTTGGGGGATTTTTTTTTTAAACGATTGAGAGGGA
ATCCGGTTATGTTGATTCTAGTGTACAAGATACTGTCTGCTGGTTCGTGATTTTTTATTTTTTGACCACT
GTATGGAAGTTGTCAGTAAACCTTTGACAGAGATGGAATTTTAAACCTG

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FIGURE 1187

CTTCCGTCGCTGCTGTAGTCGCTTCCTGCGGCCAGCCCGGGTTCAATCAGCGGCCGACAACCTGTCTAGGGCTCAG
ACACCACCAGCCAATGAGGGAGGGCAGCGTGGAGCCGCCGCTCTGGGCTCGCGGCTCCTGGACCAATGGGGAAGT
GGCATGTGGGAGGGCGCCGGGGGGCCCCCGCCAATGGGGAGCTACGCGCGCGGCCGGGACTTGGAGGCGGTGC
GGCGCGGGGGTCCGGTTCAGTCGGTCGGCGCGCGCAGCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGATGA
GGAGGATGTGGGCCACGACGGGGCTGGCGGTGGCGCTGGCTCTGAGCGTGCTGCGGGCAGCCGGCGCTGCGGC
CGGGCGACTGCGAAGTTTGTATTCTTATCTGGGAAGATTTTACCAGGACCTCAAAGACAGAGATGTCACATTCT
CACCAGCCACTATTGAAAAAGAACTTATAAAGTTCTGCCGGGAAGCAAGAGGCAAGAGAAATCGGTTGTGCTACT
ATATCGGGGCCACAGATGATGAGCCACCAAAATCATCAATGAGGTATCAAAGCCTCTGGCCACCACATCCCTG
TGGAGAAGATCTGTGAGAAGCTTAAGAAGAAGGACAGCCAGATATGTGAGCTTAAGTATGACAGCAGATCGACC
TGAGCACAGTGGACCTGAAGAAGCTCCGAGTTAAAGAGCTGAAGAAGATTCTGGATGACTGGGGGGAGACATGCA
AAGGCTGTGCAGAAAAGTCTGACTACATCCGGAAGATAAATGAACCTGATGCTAAATATGCCCCCAAGGACGCCA
GTGCACGGACCGATTTGTAGTCTGCTCAATCTCTGTGCACCTGAGGGGGGAAAAACAGTTCAACTGCTTACTCC
CAAAACAGCCTTTTTGTAATTTATTTTTTAAGTGGGCTCCTGACAAATCTGTATCAGATGTGAAGCCTGGAGCTT
TCCTGATGATGCTGGCCCTACAGTACCCCATGAGGGGATTCCTTCTCTGTGCTGCTGCTACTCTAGGACTT
CAAAGTGTGCTGGGATTTTTTATTAAAGAAAAAAATTTCTAGCTGTC

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FIGURE 1188

ACCAGCCCAGCCITTCAGTGCAGGCTCCAGCCCTCCACCCCCACCCGAGTTGCAGGATGTCGATGACAGACTTGC
TGAACGCTGAGGACATCAAGAAGGCGGTGGGAGCCTTTAGCGCTACCGACTCCTTCGACCACAAAAGTTCTTCC
AAATGGTCGGCCTGAAGAAAAAGAGTCCGGATGATGTGAAGAAGGTGTTTCACATGCTGGACAAGGACAAAAGTG
GCTTCATCGAGGAGGATGAGCTGGGATTCACTCTAAAAGGCTTCTCCCCAGATGCCAGAGACTGTCTGCTAAAG
AAACCAAGATGCTGATGGCTGCTGGAGACAAAGATGGGGACGGCAAAATTGGGGTTGACGAATTCCTCCACTCTGG
TGGCTGAAAGCTAAGAAGCACTGACTGCCCTGGTCTTCCACCTCTCTG

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FIGURE 1189

MSMTDLLNAEDIKKAVGAFSATDSFDHKKFFQMVGLKKKSAD DVKKVFHMLDKDKSGFIEEDELGFILKGFSPDA
RDLSAKETKMLMAAGDKDGDGKIGVDEFSTLVAES

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FIGURE 1190

CCGCGCCAGTCGCTAGCAGGTCCCTACCGGCTTATTCCTGTGCCGATCTTCATCGGCACAGGGGCCACTGAG
ACGTTTCTGCCTCCCTCTTTCTTCCTCCGCTCTTTCCTTCCTCCTCGTTTAGTTTGCCITGGGAGCTTGAAAGGA
GAAAGCACGGGGTCGCCCAAACCCCTTCTGCTTCGCCCATCACAAGTGCCACTACCGCCATGGCCCTCACTAT
CTCCTCCCTCTTCTCCCGACTATTGTGGCAAGAAGCAGATGCGCATTTTGATGGTTGGATTGGATGCTCTGGCAA
GACAACCATTCTGTATAAACTGAAGTTAGGGGAGATAGTCACCAACCATTCCTACCATTTGGTTTAAATGTGGAAC
AGTAGAATATAAGAACATTTGTTTCACAGTATGGGATGTTGGTGGTCAAGATAGAATTAGGCCCTCTCTGGAAGCA
TTACTTCCAGAAATACCCAGGGTCTTATTTTGTGGTAGATAGCAACGATCGTGAAAGAATTTCAGGAAGTAGCAGA
TGAGCTGCAGAAAATGCTTCTGGTAGATGAATTGAGAGATGCAGTGCTGCTACTTTTGCACAAACACAGGATTT
GCCAAATGCTATGGCCATCAGTGAATGACAGATAAACTAGGGCTTCAGTCTCTTCGTAACAGAACATGGTATGT
TCAAGCCACTTGTGCAACACAAGGAACCTGGTCTGTATGAAGGACTTGACTGGCTGTCARATGAGCTTTCAAAACG
TAAATGAAATTGGATATCTAACCAAGGACATGTTTGATAAAATTGGTCTAGGCTTGTTACAACAAAATTAGTTT
GTATCTTGGTTATTAACAGTATCTGGGACTGGTTTGGGCAGAAATATAAACTTATTTTGTGCAAAATTATGTT
TACCGAGTATAATGTTGCTATTTAGCAATGTGCTTGGTTTTAAAGAAATTCCTTGGGAAAAAAGTATCCTCTT
TTAATTTTACTTCCATAAGCGTAAATGCCTGGACATAGCTCTTGTGCAACCTTTAAATAAATTGTTTGTAGTGT
TTTTTGAGCCCCAGACAAAATAATGTTTTAAAGTTATCCCTTGCTACTTTTACTGATACCTTTATCATTCTCTGAGA
CAGTTTGTCTAATTTAAAAATGTAGCATTCATTTGTATTTATTTCTCTCCCTTGCCAAAAAGATTTTCTAATACT
GCTTGTACAGCCAGAGAAAGATCCAAAACACTACTCAGCTCTCTTGCACTGAGGAAATTTTCCCCCTACATTG
ACTCTTGCGCTACATCAGCCAACTTAACCTTGGTGGGGTTTGGATTTGATAGCCAATTAGTCTCTGTCTGGTTC
CAAAGAATTGATATTTAGATGGTTTTAATACTCAGCAGATTGCTTCCTTTATATTGTGCTCTTTTTTATGTTGC
ATGTTGCTTTTGTATCAGCCTGATTTTTGCTCAGTATATGATAGTTCTGCTGATGTTTGTATTATGGGCAGA
CATATCTTCATTAAAGAGTTTTTGGAAACCTCACCAAATTCGATGAATACATTTCTCTTAACCCATTGCGAATT
ATTCCTAATAAAATGATAAAATACGT

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FIGURE 1191

MGLTISSLFSRLFQKKQMRILMVGLDAAGKTTILYKLKLGEIVTTIPTIGFNVETVEYKNICFTVWDVGGQDRIR
PLWKHYFQNTIQLGIFVVDSDNRERIQEVADELQKMLLVDELDAVLLLFANKQDLPNAMAISEMTDKLGLQSLRN
RTWYVQATCATQGTGLYEGLDWLSNELSKR

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FIGURE 1192

TCAGGAATCGGGATTAAAAAGTTAAACGACCAGCATCCTTTGCTATAAGGTTGAATGGCGCAAAAGGCAAGATTGA
TGTATAGGTGCACAGCCCCCTCTGGAGCCGTGGAGGAGTGCCACGTTGCTGAGCTGGAGCCAGATAAGTATGCTGT
TCGCTTCATCCCTCATGAGAATGGTGTCCACACCATCGATGTCAGTTCAATGGGAGCCACGTGGTTGGAAGCCC
CTTCAAAGTGGCGTTGGGGAGCCTGGACAAGCGGGGAACCCCTGCCCTGGTGTCCGCCATATGGCAGGGACATCGA
AGGGGGCACCACAGGTATCCAGTCGGAATCTTTATTAACACACCCGAGCAGGTCCAGGGACATTATCCGTCAC
CATCGAAGGCCCATCCAAAGTTTAAATGGATTGCCAGGAAACACCTGAAGGGTACAAAGTCATGTACACCCCAT
GGCTCCTGGTAACATACCTGATCAGCGTCAAATACGGTGGGCCCAACCACATCGTGGGCAGTCCCTTCAAGGCCAA
GGTGACAGGCCAGCGCTAGTTAGCCCTGGCTCAGCCAACGAGACCTCATCCATCTGGTGGAGTCAGTGACCAG
GTCGCTACAGAGACCTGCTATAGCGCCATTCCCAAGGCATCCTCGGACGCCAGCAAGGTGACCTCTAAGGGGGC
AGGGCTCTCAAAGGCCCTTTGTGGGCCAGAAGAATTCCTTCTCGTGGACTCGACGAAAGCTGGCTCCAACATGC
TGCTGATCGGGGTCCATGGGCCACCACCCCTGCGAGGAGGTCTCCATGAAGCATGTAGGCAACCAGCAATACA
ACGTACATACGTCGTCAAGGAGAGGGGGCGATTATGTGCTGGCTGTGAAGTGGGGGAGGAACACATCCCTGGCA
GCCCTTTTCATGTACAGTGCCTTAAACAGTTTTCTCAAATCCTGGAGAGAGTTCTTGTGGTTGCTTTTGTGTC
TTGTTTGTAAATTCATTTTATACAAAGCCCTCCAGCCTGTTTGTGGGGCTGAAACCCCATCCCTAAAAATTGCTG
TTGTAAATGCCTTCAGAAATAAGTCTTAGCTGGACTCTTGAGGACATATTGGAGAATCTTAAGAAATGCAAG
CTTGTTTCAGGGGGCTGAGAAGATCCTGAGTACACTAGGTGCAAAACAGAACTCTTGGTGGAAACAGACAGGCCACT
GCAGCAGACAGACCAGGAACACAATGAGACTGACATTTCAAAAAACAAAACCTGGCTAGCCTGAGCTGCTGGTTC
ACTCTTCAGCATTATGAACAAAGGCTAGGGGAAGATTGGGCAGAGAAAAAGGGGACACCTAGTTTGGTTGTCATT
TGGCAAGGAGATGACTTAAATCCGCTTAATCTCTTCAGTGTCCGTGTTAATGTATTGGCTATTAGATCACT
AGCACTGCTTTACCGCTCTCATCGCAACACCCCATGCTCTGTGGCTTCTTCACTTCTCAGAAGGACAGAT
GGCAGCCGGGCCACCTACAGAAACTCAGAGGGCAGAGTGGCAGCCAGGCCACATGCTCTCTCAAGTACTGTCCC
CTCGCTCTGGTGATTATTTCTTCGAGAATCACCACAGAGACCATCCCGGCAGTCACTGGTTTGGCTTTAGTTTTT
CAAGTCGGTTTCAGTCCCTTCTTGGTCTGAAGAAATCTCGAGTGGCGAGCAGTTTCCCACTTGCCAAAGATCC
CTTTTAAACACACTAGCCCTTGTTTTTAACACACGCTCCAGCCCTTCATCAGCCTGGGCAGTCTTACCAAAATG
TTTTAAGTGATCTCAGAGGGGCCCATGGATTAACGCCCTCATCCCAAGTCCGTCCTGACATAACACTCCACA
CCCCGCCAGCCCAACTTCATGGTCACTTTTCTGGAATAATGATCTGTACAGACAGGACAGAATGAACTCC
TGCGGGTCTTTGGCTGAAAGTTGGGAATGGTTGGGGGAGAGAAGGCGACAGCTTATTGGTGTCTTTTACCA
TTGGCAGAAACAGTGAGAGCTGTGGTGCAAGAAATCCAGAAATGAGGTGTAGGGAAATTTGCTGCTTCTGTC
AGACCTGAGCTGGCTTTGGAATGAGGTTAAAGTGTCAAGGACGTTGCTGAGCCCAAAATGTGAGTGTGGCTGG
GCAGGCAGACCTTTAGGTTTTGCTGCTTAGTCCTGAGGAAGTGGCCACTCTTGTGGCAGGTGTAGTATCTGGGGC
GAGTGTGGGGGTAAAGCCCACTTACAGAAAGTGAACAGCCCGGAGCCTGATGTGAAGGACCACGGGTGT
GTAACTGG

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FIGURE 1193

ATAGAGGACACGACCAAGATGGCGGCGGTGCTGGCTTGGTGGGAGACCCCTTCGGGAGGTCTCCGGGCTGCTG
AAGAGGCGCTTTCACCTGGACCGCCGCCGCTGCGCTGCAGGTGACAGTTCGTGATGCTATAAATCAGGGTATGGAT
GAGGAGCTGGAAAGAGATGAGAAGGTATTTCTGCTTGGAGAAGAAGTTGCCAGTATGATGGGCATACAAGGTT
AGTCGAGGGCTGTGGAAGAAATATGGAGACAAGAGGATTATTGACACTCCCATATCAGAGATGGGCTTTGTGCGA
ATTGCTGTAGGTGCAGCTATGGCTGGGTTGCGGCCCATTTGTGAATTTATGACCTTCAATTTCTCCATGCAAGCC
ATTGACCAGGTTATAAATCAGCTGCCAAGACCTACTACATGTCTGGTGGCCTTCAGCCTGTGCCTATAGTCTTC
AGAGGGCCCAATGGTGCCTCAGCAGGTGTAGCTGCCAGCACTCACAGTGCTTTGCTGCCTGGTATGGGCACTGC
CCAGGCTTAAAGGTGGTCAGTCCCTGGAATTCAGAGGATGCTAAAGGACTTATTAATCAGCCATTCGGGATAAC
AATCCAGTGGTGGTGTAGAGAATGAATTGATGTATGGGTTCCITTTGAATTTCTCCGGAAGCTCAGTCAAAA
GATTTTCTGATTCCTATTGGAAGCCAAAATAGAAAGGCAAGGAACACATATAACTGTGGTTTCCCAATCAAGA
CCTGTGGGCCACTGCTTAGAAGCTGCAGCAGTGCTATCTAAAGAAGGAGTTGAATGTGAGGTGATAAATATGCGT
ACCATTAGACCAATGGACATGGAAACCATAGAAGCCAGTGTGATGAAGACAAATCATCTTGAACCTGTGGAAGGA
GGCTGGCCACAGTTGGAGTAGGAGCTGAAATCTGTGCCAGGATCATGGAAGGTCCTGCGTTCAATTTCCCTGGAT
GCTCCTGCTGTTCTGTCACTGGTGTGATGTCCCTATGCCCTATGCAAAAGATTCTAGAGGACAACCTCTATACCT
CAGGICAAAGACATCATATTGGCAATAAGAAAAACATTAAATATTAGTTTGGACTTGAATATCAAGTCGTTGAA
ATTTATTTGAAATACTTGCTGGCACTGCACCTGGATTGTACTGCAAGACCTGACTATTCTAACGGAACGAT
TTCTAAAGCAACAGCAGGTATTTTGTACAGGGAAGTTAAATGTGTTTGTGTATGGAACAACTCTCCACTCTCCT
CCCTAGATGCCATGCTTCTTTTGTCTGTACGGTTGCCATGTCTTTGAATAACAAATTATATAACATTTTAT
CCTCTCACCACAAGGACAAAGTATGGATGTGGCAGAGTCTCATGAAAGATGTATCCAAACAAGATAACTTAT
ATGTATAAAATTAAGCATATAATATACATTTACTGTAGTTTGTGTTTGTATAAGGAATAAGGAATTTCTAACAT
G

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FIGURE 1194

MAAVSGLVRRPLREVSGLLKRRFHWTAAPALQVTVRDAINQGMDEELERDEKVFLLGEEVAQYDGAYKVSRLWK
KYGDKRIIDTPISEMGFAGIAVGAAMAGLRPICEFMTFNFMSQAIDQVINSAAKTYYSGGGLQPVPIVFRGPNGA
SAGVAAQHSQCFAANYGHCPGLKVVSFWNSDAKGLIKSAIRDNNPVVLENELMYGVPFEPPEAQSKDFLIP I
GKAKIERQGTHTITVVSRSRPVGHCLAAAVLSKEGVECEVINMRTIRPMDMETIEASVMKTNHLVTVEGGWPQFG
VGAEICARIMEGPAFNFLDAPAVRVIGADVPMPIYAKILEDNSIPQVKDIIFAIKKTLNI

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FIGURE 1195

GTGAGCCGCTGTCCCTTAGCCGCGATGCGCGCTGGAGAACCTGGAGGAGGAGGGTCTGCCCAAGAACCCGACTT
GCGTATCGCGCAGCTGCGCTTTCCTGCTCAGCCTGCCCGAGCACCGCGGAGACGCTGCCGTGCGGACGAGCTGAT
GGCGGCCGCTCCGCATACAAACATGGCTCCTTACTATGAAGCCTTGTCAAATCCCTCGACTGGCAGATAGACGT
GGACCTACTCAATAAAATGAAGAAGGCAAATGAAGATGAGTTGAAGCGTTTGGATGAGGAGCTGGAAGATGCAGA
GAAGAATCTAGGAGAGAGCGAAATTCGCGATGCAATGATGGCAAGGCCGAGTACCTCTGCCGGATAGGTGACAA
AGAGGAGCTCTGACAGCCTTTCGCAAGACATATGACAAAACCTGTGGCCCTGGGTCACCGATTGGATATTGTATT
CTATCTCCTTAGGATTGGCTTATTTTATATGGATAATGATCTCATCACACGAAACACAGAAAAGGCCAAAAGCTT
AATAGAAGAAGGAGGAGACTGGGACAGGAGAAACCGCCTAAAAGTGTATCAGGCTCTTTATTGTGTGGCTATTCTG
TGATTTCAAACAGGCAGCTGAACTCTTCCTTGACACTGTTTCAACATTTACATCTATGAACTCATGGATTATAA
AACATTTGTGACTTATACGTCTATGTCAGTATGATGCCTTAGAAAGACCAGATCTCAGGGAAGGTCATTAA
AGGAGCAGAGATCTTGAAGTGTGACAGTCTCCAGCAGTTCGGCAGTATCTGTTTTCACCTATGAATGCCG
TTACICTGTTTTCTTCCAATCATTAGCGGTTGTGGAACAGGAAATGAAAAGGACTGGCTTTTTGCCCTCATTA
TCGATACTATGTAAGAGAAATGAGAATTCATGCATACAGTCAGCTGCTGGAATCATATAGGTCATTAAACCTTGG
CTATATGGCAGAAGCGTTTTGGTGTGGTGTGGAATTCATTGATCAGGAACCTGCCAGGTTTATTGCTGCCGGGAG
ACTACACTGCAAAATAGATAAAGTGAATGAAATAGTAAACCAACAGACCTGTATAGCAAGAACTGGCAGTACCA
AGAAACTATCAAGAAAGGAGATCTGCTACTAAACAGAGTTCAAACACTTCCAGAGTAATTAATATGTAAAGCCA
TGTAACATAACAAAGGATTGCTTTAGAGATAATTATTGGAATTTTATAGCTTACTTCACAATGIGCCAGGTC
AGCTGTATAAAATAAATACTGCATTGTTGTTTC

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FIGURE 1196

MPLENLEEGLPKNPDLRIAQLRFLLSLPEHRGDAVRDELMAAVRDNNMAPYYEALCKSLDWQIDVDLLNKMKK
ANEDELKRLEDELEDAEKNLGESEIRDAMMAKAEYLCRIGDKEGALTAFRKTYDKTVALGHRLDIVFYLLRIGLF
YMDNDLITRNTEKAKSLIEGGDWRRNRNLKVQGLYCVAIRDFKQAELFLDTVSTFTSYELMDYKTFVITYTVY
VSMIALERPDLREKVIKGAETLEVLHSLPAVRQYLFSLYECRYSVFFQSLAVVEQEMKDWLFAPHYRYVYVREMR
IHAYSQLLLESYRSLTLGYMAEAFGVGVEFIDQELSRFIAAGRLHCKIDKVNEIVETNRPDSKNWQYQETIKKGDL
LLNRVQKLSRVINM

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FIGURE 1197

GAGAAGCCATGAGCAGCAGTCTCTCGCAACACCTGTACGAGGCGGTGCGGGAAGTCCTGCACCGGAACCAAGCGC
AAGCGCCGCAAGTTCTTGAGACGGTGGAGTTGCAGATCAGCTTGAAGAACTATGACCCCGAAGGACAAGTGC
TTCTCGGGCACCGTCAGACTTAAGTCCACTCCCCGCCCTAAGTTGTGTGTGTCTCTGGGGACCAGCAGCAC
TGTGACGAGGCTAAGGCCGTGGATATCCCCACATGGACATCGAGGCGCTGAAAAAAGCTCAAAAAGAATAAAAA
CTGGTCAAGAAGCTGGCCAAAGATATGATGCGTTTTTGGCCTCAGAGTCTCTGATCAAGCAGATTCCACGAATC
CTCGGCCAGGTCTAAATAAGGCAGGAAAGTTCCCTTCCCTGCTCACACACAACGAAAAACATGGTGGCCAAAGTG
GGTGAGGTGAAGTCCACAATCAAGTTCCAAATGAAGAAGGTGTTATGTCTGGCTGTAGCTGTTGGTCACGTGAAG
ATGACAGCCGATGAGCTTGTGTATAACATTACCTGGCTGTCAACTTCTGGTGTCATTGCTCAAGAAAACTGG
CAGAAATGTCCGGCCCTTATATATCGAGAGCACCATGGGCAAGCCCCAGCGCCTATATTAAGGCACATTGAATAA
ATTCTATTACAGTTCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1198

GCTCAAGTGGCCAAGGCAAGATGGGTCAAAGTCAGAGTGGTGGTCATGGTCTGGAGGTGGCAAGAAGGATGACA
AGGACAAGAAAAAGAAATATGAACCTCCTGTACCAACTAGAGTGGGGAAAAAGAGAAGAAAAACAAAGGGACCAG
ATGCTGCCAGCAAACCTGCCACTGGTGACACCTCACACTCAGTGCCGGTTAAAAATTACTGAAGTTAGAGAGAATTA
AAGACTATCTTCTCATGGAGGAAGAATTCAATAGAAATCAGGAACAAATGAAACCATTAGAAGAAAGCAAGAGG
AGGAAAGATCAAAGTGGATGATCTGAGGGGGACCCCGATGTCAGTAGGAACCTTGGAAAGAGATCATTGATGACA
ATCATGCCATCGTGCTACATCTGTGGGCTCAGAACACTACGTCAGCATTCTTTTCATTGTAGACAAGGATCTGC
TGGAACTGGCTGCTCGGTCTGCTCAACCACAAGGTGCATGCCGTGATAGGGGTGCTGATGGATGACACGGATC
CCCTGGTCA CAGTGATGAAGGTAGAAAAAGGCCCCCAGGAGACCTATGCAGATATTGGGGGTTGGACAACCAA
TTCAGGAAATTAAGGAATCTGTGGAGCTTCCTCTCACCCATCCTGAATATTATGAAGAGATGGGTATAAGCCTC
CTAAGGGGGTCATTCTCTATGGTCCACCTGGCACAGSTAAAACCTTGTTAGCCAAAGCAGTAGCAAAACCAAACCT
CAGCCACTTTCTTGAGAGTGGTTGGCTCTGAACCTATTCAGAAGTACCTAGGTGATGGGCCCAAACCTCGTACGGG
AATTGTTCCGAGTTGCTGAAGAACATGCACCGTCCATCGTGTATTATGATGAAATTGACGCCATTGGGACAAAA
GATAAGACTCCAATTCGGTGGTGAGAGAGAAATTCAGCGAACCAATGTTGGAACCTGCTGAACCAAGTTGGATGGAT
TTGATTCTAGGGGAGATGTGAAAGTTATCATGGCCACAACCGAATAGAACTTTGGATCCAGCACTTATCAGAC
CAGGCCCGATTGACAGGAAGATTGAGTCCCCCTGCCTGATGAAAGACGAAGAAGCGCATCTTTTCAGATTACACA
CAAGCAGGATGACGCTGGCTGATGATGAACCTGGACGACCTGATCATGGCTAAGATGACCTCTCTGGTGTCTG
ACATCAAGGCAATCTGTACAGAAGCTGGTCTGATGGCCTTAAGAGAACCTAGAAATGAAAGTAAACAAATGAAGACT
TCAAAAAATCTAAGAAAAATGTTCTTTATAAGAAACAGGAAGGCCACCCCTGAGGGGCTGTATCTCTAATGAACCA
TGGCTGTATCAGGAAAAATGGTTGGGAGATTTCTCAGTCCCTGAAAGGGATGAGGCTGGGGGAGTTGCCAGAGG
AATCCCTGTTCCCACTGATTTTATTAGCAAAACATCCTGTGTCTTTTGAGGTACGATGTGTAAGTGCCCATTTGG
GTGGCTGTTGGTCACTGTGCAGCAGTCTGTCCCAATAAAGCGTGCTCTTTCACAA

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FIGURE 1199

ATGCCTTCAAAGGAAAAGCAAGGGACACTCACCTTGCAAACCATCAAACATATCCACAGAGGCCACATGAGC
CCCCATTATCTGACTTAAAGAAGCAGGGTCTGCTGGGATTCTGAATCCTCTGGTTCCAGAGAGAGAAGCTCTTT
CAAAGACTGGATTCTGGCCACAAAAGAAGGTTCTGCTTACTGGAATCAAGAGGTCAAAGATTTTTCTGAATCA
TGATCCACGAGAGAAGAGCCATTAGGGCTATTCCAGCAGACAGCAGTAAGGATGCCATGAGCTTTATGTTGTT
GTTGGGAGCTGGGATTCTACTCTTCCAGAAGAATATGACCTCAAAGAGGAGCCACCACAGAACGAGCTCGGCACCC
ATCTACGAATGTATTGCTAAGGATCATTGGGGATGGGGTGACCCAGAAGTGAAC TGCTCCATGATCCATTAAAC
AATCACCTGAAATCCACAGTGCCAGTCAACTAATGGGGCTTGGAGCCATCATTAGGTCACTGGAAAATGATATC
TTCCTGGAGGTTGATACTGGCTTACCATCCTGAGAGCAGAAGGCTTGAGGGAGGAACAGCCTCCTGGGCATGGA
GGCACCTGCCATCCACATCAATCACAGAGCCATGCTTAAAGGGGCCAGGTGGATGACTTATGTGGAAGAAGTG
AGCCGGGTGAGGATTTCTACTTCCAGAAAACCTTGCTCGAAGCGCTTTCATCATTCTCTCTACACAACAAACCCCT
GAACCTTAGAAGCAGCTCTTGGCACAGGAGCCTCCAACCCGTTTTTCAGCCGGCTTTCTCTACTTGTTCCTCAT
TCCATGATCACAGAAAACAGCTCCATTAAAGACTCTTTTCAGGTCTACCAAAGAGCTAGTGATTGCACTCAATCGA
TGTTTTCTCGGCATTACTCAAAGTGCAGCTACACTCAGCCCACAGCTTCACATCAGATTTATCAGCAGAGAACA
AAGAAGTACTTGAAATTGCCACTTACACGTTTATGAGTAAACTGGAATCCAAAGTCTGGCCTCTAGCCAAAGCGG
TTACGCCAGTGGCTGACTCATATACAAGAAGTTTGAGCACAGAATCTACCCOATCACATTTCTGTTGGAAAC
CCTCAGGAGTGAAGAATTTGTCAAACCTGTGCTGCCAGAGACTCTTTCTCCGATCAACCTGGAGCTCTAC
GCCCTCTACGTTTACCTGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAAGCTTTGCCAAATAC
TTTCTTACCAATCTCATGAGGAGAGGGAACATGCCGAGAACTGATGACGTTGCAAGACCAACGAGGTGGCCGA
ATCTTCTTTCAGGATATCAAGAAACCACTGTGACGACTGGGAGAGCGGGCTGAATGCGATGGATGACAAAAAT
GACCCCCATTGTGTGACTTCATTGAGACATTACCTGAATGAGCAGGTGAAAGCCATCAAAGAATTTGGGTGGC
CACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTCGCAGAAATATCTTTTGACAAGCACACGCTG
GGAGACAGTGATAACGAAAGCTAA

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FIGURE 1200

MPSKEKQGTLLQNHQNYSHRRHMSPHLSDLKEAGSAGIRILWFQREKLFQRLD SGPKKVPAYWNQEVKDFSES
CIHGEEPIRAIPADSSKDVHELYVVVGSWDSTLP E EYDLKRSHRTSSAPIYECIAKDHGWGDPEVNWLDPLN
NHPEIHSASQLMGLGAIIRSLNDIFLEVDTGFTILRAEGLREEQPPGHGGTCHFTSNHRAMLKRARWMTYVEEV
SRVRISTRNLARSAPIILSYTTNPELLEAALGTGASNPFPSRLSLLVSHSMITENS IKTLFRSTKELVIGPKD
ARRDFQVVS RGSADFWRKLASDGSICLLSIGKPELIRLIQLIK

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FIGURE 1201

ATGATCTTTAATTTT GCCCTGAATACCTTGGTTGCAATCACTGTGCTTGT TATCCAAACGGCATT CAGGAATAC
ATACGACAACTGCCTCCGAATTTTCCCTACAGAGATGATGT CATGAGGCCTGGAGACCCAGGAGTTTCCAAGCT
GTGCTGCCACCCGAGCTCTGGATCCACCTGGCTGTGGTGGCCTGTGCAATCGGCTGGAGGAGACGCTGGTCATG
CTCAAAATCAGCTGTGCTTTT TAGCCACAGGAAGATCCAATTCACATCTTCACTGAAGACTCTCTGAAGCCGAG
TTTGATAAGCAGTTACGCCAGTGGCCTGACTCATATACAAGAAGTTTGAGCACAGAATCTACCCCATCACATTT
TCTGTTGGAACCCCTCAGGAGTGGAAAGAAATTGTTCAAACCCCTGTGCTGCCAGAGACTCTTCTTCCGATCAAC
CTGGAGCTCTACGCCCTCTACGTTTACCTGTCCATGTCTTACTACTTTGACCCGCGATGATGTGGCTTTGAAGAAC
TTTGCCAAATACTTTCTTACC AATCTCATGAGGAGAGGGAACATGCCGAGAAACTGATGACGTTGCAGAACCAA
CGAGGTGGCCGAATCTTCTT CAGGATATCAAGAAACCAGACTGTGACGACTGGGAGAGCGGGCTGAATGCGATG
GATGACAAAAATGACCCCATTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGGTGAAAGCCATCAAA
GAATTGGGTGGCCACGTGACCAACTTGTGCAAGATGGGAGCACCCGAATCTGGCTCGGCAGAAATATCTCTTTGAC
AAGCACACGCTGGGAGACAGTGATAACGAAAGCTAA

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FIGURE 1202

GTCGGCGTGTGCGAGTGGCTCTTCTGGCTGCTGAGGCGGGTTAAGGTCTGAGGGTCTTGTGGGGCCACGGCGCTG
ATCACCAGGTGTTTGGCTTGGTCGGTCTTATTTCTCGCTGGCAATGGCGACGTACACCTGCATAACTTGCCGG
GTGGCGTTCCGGCAGCGGGACATGCAGCGGGCCACTATAAGACGGA CTGCCACCTGCGGCGGAAG
GTGGCCAGCATGGCCCCAGTGACCGCCGAGGGCTTCCAGGAGCGAGTGGCGGCGCAGCGGGCCGTCGCGAGGAG
GAGAGCAAGGGCTCGGCCACCTACTGCACCGTTTGCAGTAAGAAGTTTGCCTCTTTCACGCCCTACGAGAACCAC
CTCAAGTCCCGCGCTCACGTTGAGCTGGAGAAGAAGGCCGTGCAGGCACTGAATCGGAAATGGAGATGATGAAT
GAAAAGAACTTGGAGAAAGGACTGGCGTGGACAGTGTGGACAAGGATGCCATGAACGCGGCCATCCAGCAGGCC
ATCAAGGCCACGCCGTCCATGTCTCCCAAGAAGGCCGCCCGCAGCGCTGCAAGGAGGCCAGGAATGCTGTGGCC
GTGGGTACTGTGTGGCCGTGGGACCCACGACCGAGACCCGAGTGAGAAACACCCCGGCTCCAGTGGTTTGAACAG
CAGGCAGGAAGTTGGCAAAGCAGCAGGAGGAGCAGCGAGGAGGAGGAAGAGGACCTGGATGGAGACGATTTGG
GAAGATATTGATTTCTGATGAAGAATTGGAATGTGAGGATACTGAAGCAATGGACGATGTGGTGGAGCAGGATGCA
GAGGAGGAAGAGGCTGAGGAAGGCCACCCCTTGGTGCCATCCCTATCACGGACTGCTTATTTTGTTCCTCAT
TCCAGCTCGCTGATGAAGAATGTGGCTCACATGACCAAGACCAAGTTTCTTTATTCCTGATATAGAATATCTT
TCAGATATTAAGGGACTGATTAAATCTTGGGAGAGAAAGTTGGTGTGGCAAGATTTGCTTGTGGTGCAACGAG
AAAGGGAAGTCCTTCTACTCCACAGAAGCTGTACAGGCACATATGAATGACAAAAGCCACTGTAAGCTCTTCACA
GATGCGGATGCTGCTTTGGAAATTGAGACTTCTATGATTTTAGGATAGCTATCCAGATCACAAAGGAAGGGGAG
GACCCCAATAAGGCTGAGGAGTTGCCCTCAGAAAAGAACTTGAATATGATGATGAACCATGGAATTGATCTG
CCTTCTGGTGCCAGATGGGTATCGCTCCTTGATGAGATACTACAAACAGCGATTTGGCTTGTCAAGAGCTGTG
GCAGTTGCCAAAATCGGAAGGCCGTGGGCCGAGTACTTCAGCAGTACAGAGCCCTGGGATGGACTGGCAGCACA
GGAGCGGCTCTTATGCGAGGCGAGACATGCAGTATGTCCAAAGGATGAAATCAAATGGAATGCTGAAGACAGGA
ATGAAGAACAATGCCACCAAGCAGATGCACCTTCGGGTCCAAGTGAGATTCTGAGTCTGCTGGGATTGAGCAA
TCATCTCTCGCCAAAGTTTCCTCCTTGGCTGAGGACCAAGTGAAGACAGATCATAGGAGAGACCCCTTTGCTGC
TACITCATTCGTTCTGACCTAATAATAAAGTTAGAACCAT

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FIGURE 1203

GCAGACGCCATTATCCTCTGTTTCTCTGCTGCACCGACCTCGACGCCTTGCCCTGTGGCCCACTTGTTCACTGACT
ATAGGCTACTGCACGACTGGGGTGTGAGTTGTTGGTCCCACCCAGAACGCTTCAGTTCTGCTCTGCAAGGATATA
TAATAACTGATTGGTGTGCCCATTTAATAAAAGAATAGTAACTGAACAGCCGGAAGAAACCTTCCCGAACACT
GAAACCAATGGTGAAATTTGGTAAACACCCTGCAGAAGATATGGAAGAGTAACAAGCATTTAAAGATCTAGAAAC
ACTGATGAGATGGTTGAATTACGCATTCTGCTTCAGACCAAGAATGCTGGGGCAGTGATTGGAAGGAGGCAAG
AATATCAAGGCTCTCCGTACAGACTACAATGCCAGTGTTCAGTCCCAGACAGCAGTGGCCCCGAGCACATATTG
AGTATCAGTGCTGGTATTGACACAATTGGAGAAATCTGAAGAAAATCATCCCTACCTTGGAGAGTACCAACAC
TATAAAGGAAGTGACTTTGACTGCGAGTTGAGGCTGTTGATTTCATCAGAGTCTAGCAGGAGGAATTATTGGGGTC
GAAGGTGCTAAAATCAAAGAACTTCGAGAGAACACTCAAACCACCATCAAGCTTTTCCAGGAATGCTGTCCTTAT
TCCACTGACAGAGTTGTTCTTATTGGAGGAAAACCCGATAGGGTGTGAGAGTCATAAAGATCATCCTTGATCT
TATATATGAGTCTCCCATCAAAGGACGTGCACAGCCTTATGATCCCAATTTTATGATGAAACCTATGATTATGG
TGGTTTTACAATTATGTTTGATGACCGCTGTGGACGCCAGTGGGATTTCCTATGCGGGGAAGAGGTGGTTTTGA
CAGAAATGCCTCCTGGTCAGGGTGGGCGTCCCATGCCTCCATCTAGAAGAGATTATGATGATATGAGCCCTCGTCA
AGGACCACCTCCACCTCTCCAGGACAAGGTGGTGAGGGTGGTAGCAGAGCTCGGAATCTTCCTCTTCTCCTCCTCC
ACCACCACCTAGAGGGGGAGACCTCATGGCCTATGACAGAAGAGGGAGACCTGGAGACTGTTACCATGGCATGGT
TGGTTTCAGTGTGATGAAACTTGGGACTCTGCAATAGATACATGGAGCCCATCAGAAATGGCAGATGGCTTATGA
ACCACAGGGTGGCTCCAGATATGATTATTCCTATGACAGGGGCTCGTGGCTCATATGGTAATCTTGGTGSACTTAT
TATTACTACACAAGTAACGATTCCCAAAGATTITGGCTGGATCTATTATTG

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FIGURE 1204

ATGAATAAGGAGAATCACTCCTTGATAGCTGAGTTCATCCTCACAGGATTACATATCATCCAAAGCTGAAGACT
GTTCTGTTTGGTGTCTTTGCCATCTATCTGATCACCATGGTGGGGAACATTGGTTTGGTGGCATTGATTTAT
ATAGAGCAACGCTTCACACACCAATGTACATATTTTAGGCAACCTAGTTCTGATGGATTCTGCTGTTCCCTCT
GCTATTACTCCCAAGATGTTAGAGAACTTCTTTCTGAGGACAAAAGGATTACCCCTGTATGAATGTATGGCACAA
TTTTATTCTCTGCTTGTGCTGAACTACAGACTGCTTCTCTGGCGGCAATGGCCATGACTGCTATGTGGCC
ATATGCAACCCACTGCAGTACCACACCATGATGTCCAAGACACTCTGCATTGAGATGACTGCAGGAGCCTACCTA
GCTGGCAACCTGCATCCCATGATTGAAAACCTTTTGCCAGAGTAGCAGCCAACTTGAGGTTGCCCGGATTCT
GACATCATTGCAATCAAGTCACCTGACACATTGTGAGAACTATTTATGCAGGAAATGCTCTATGTACAGTGAAG
TGTGATGAGAAAGTGAAAGTGTCTTCTGTCCTGGGAACATCCTTTGATGCTGCAGCAACAAGTGCCGTTAGTGCC
AGTTCAGAAAAGGCATCAAGTACTTCACCAGTGGAATATCAGAGTGGCTTGACCAGAAATTAACAAAAGTGAT
CGACCAGAGCTAACAGGTGCCAAAGTGGTGTATCTGGTGACTGCTATCCATCTTATAACACACTCATTCTTCAG
ACACATCACAATGCATGATCAGATTACAGCTTCTTTACCTTAAGGATGCTTCAACCACCACAAGCCCTTTC
CAAAATCCCTACGTAGATAAAATTGGCTTTTCTAG

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FIGURE 1205

ATGATCAGGIGTGATAAGTGCTGTAATGAAGGCAATTACAAGGAGAGGATATTTGAAATCATTGCTGTGGAGGGT
GAGAGTGCGAACAAAGGAAGTTGTGGTAGCATTGCTAGACAGTTTTGAGAGCCCAGCTCCAGAGCTTAAGGTTATT
GCTGAATTAAGCCAGCCTCATTGCTACGATTTCAGAGTACCCTGGTAATAGCTGAGCATGCAAATGATTCCCTA
GCACCCATTACTTTAAATACCATTACTGCAGCCACACGCCCTTGGAGGTGAAGTGTCTGCTTAGTAGCTGGAACC
AAATGTGACAAGGTGGCACAAGATCTCTGTAAGTAGCAGGCATAGCAAAAGTTCTGGTGGCTCAGCATGATGTG
TACAAAGGCCTACTTCCAGGTGAGGTTTCCAGTAG

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FIGURE 1206

TCTTTTCGCCATCTTTTGTCTTTCCGTGGAGCTGTCGCCATGAAGGTCGAGCTGTGCAGTTTTAGCGGGTACAAG
ATCTACCCCGGACACGGGAGGCGCTACGCCAGGACCGACGGGAAGGTTTTCCAGTTTCTTAATGCGAAATGCGAG
TCGGCTTTCCTTTCCAAGAGGAATCCTCGGCAGATAAACTGGACTGTCCTCTACAGAAGGAAGCACAAAAGGGA
CAGTCGGAAGAAATTCAAAAGAAAAGAACCCGCCGAGCAGTCAAATCCAGAGGGCCATTACTGGTGCATCTCTT
GCTGATATAATGGCCAAGAGGAATCAGAAACCTGAAGTTAGAAAGGCTCAACGAGAACAAGCTATCAGGGCTGCT
AAGGAAGCAAAAAGGCTAAGCAAGCATCTAAAAAGACTGCAATGGCTGCTGCTAAGGCACCTACAAAGGCAGCA
CCTAAGCAAAAGATTGTGAAGCCTGTGAAAGTTTCAGCTCCCGAGTTGGTGGAAAACGCTAAAAACTGGCAGATT
GATTTTAAATAAAGATTGGATTATAACTCT

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FIGURE 1207

MKVELCSFSGYKIYPGHGRRYARTDGKVFQFLNAKCESAFLSKRNPRQINWTVLYRRKHKKGQSEEIQKKRTRRA
VKFQRAITGASLADIMAKRNQKPEVRKAQREQAIRAAKEAKKAKQASKKTAMAAAKAPTKAAPKQKIVKPVKVS
PRVGGKR

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FIGURE 1208

GCTCCTCCACAGGAGGCCTACACGCCGCCGCTTGTGCTGCCGCCATGTCGCTAGTGATCCCTGAAAAGTTCCAGC
ATATTTTGCAGTACTCAACCAACATCGATGGGCAGCGGAAAAATAGCCTTTGCCATCACTGCCATTAAGGGTG
TGGGCCGAAGATATGCTCATGTGGTGTGAGGAAAGCAGACCTGACCTCACCAGAGGGCGGGAGAACTCACTG
ATGATGAGGTGGAACGTGTGATCACCGTTATGCAGAATCCACGCCAGTACAAGATCCCAGACTGGTTCTTGAACA
GACAGAAGGATGTAAAGGATGGAATAATAGCCAGGTCTTAGCCAATGGICTGGACAACAAGCTCCGTGAAGACC
TGGAGCGACTGAAGAAGATTCGGGCCCATAGAGGGCTGCGTCACTTCTGGGGCCTTCGTGTCCGAGGCCAGCACA
CCAAGACCACTGGCCGCCGTGGCCGACCGTGGGTGTGTCCAAGAAGAAATAAGTCTGTAGGCCTTGTCGTGTAA
TAAATAGTTTATATACC

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FIGURE 1209

ACCGCGGGGCTGGGTCCAGCGGGCAGCAGAGAGCTGGTCGCCACCACCCCAAGCTACTGCTGCCGCTGGCT
ATTTCCCGGGGGGGGGGTACGTGGTGGTGGCTGAGAGGCCCTTGGCGCTGGCGAGTGGGAGCTGTGCCGCGCAG
TCCCGGGCCCTGCTTACGAGGAGGAGGGCCTCCCTCGCTACCAGCGTCTGGTGCCCTCTCGACGCGCATCG
TGCGGACGGCTCCCTGAGGACAGCCCGGAGCGCGGGGCTCAGCAAGCGCCCGCTGTCCGAGGAGCTCAAGT
GGTGGCAGGAGCTGCAGCGCTCCGGAGCACC GCCCCCACTACTGGACC GCCCAAGGAGCTTCCGGGT CAGGA
GCCTGCCCTTGGGAGAGAGGGCTTCGGCGAGCGCTGGGACCCCGGGGCACAGGTGCCACAGTGTGTGCTGCG
GGAGATCGCTGACGGGGCCCTGTGCAAGTCTTTGTACCTGAAAAGGAGAGATCATCAGCCAGGTGTAACTCT
CGGCCCCACGCTGGAaaaaaactGTTTCATAGAGGGGCTGGGCTGAGACCCCCCCACCCCTGAGTGCCTCTTCAG
CTTCCCATCCCCATCGCAGGCCGATGACCTGGAGCTGAGACCTTTTATTATTTTTTTTTTACACGACTTTTTTC
AGAAGCCCTGACCTAAGGATTATATATGTGGATTGTCTCAATACCCCTGTGATATGATTATGTTTTATCCCCC
AGAGTTTGGCTACTGGACTTAAGGCCCTTGCTGTCTGACTGACAGCCTCTATCTCCTTATATAAGACAAGTGGC
AGGGGACGAGTGAAGCAGAGTGGGCCACCTGGGAGTCTCCAACACTCTGTGCTCTGGTCTAAGAAATTCCT
GGGGAAC TGCCCTGGCCCTCCTGTCCCACTATTGCTGGAGGCTGGACATGGTACATACTCATGACACATGACTCT
CCCCATTTCAGGTCTCTGGGTACCCAGCCTGGGCTGGGGGAGAATCTCTTCCCCCTTCTAATGTGCTCTG
TGATGCACACACCAAGTGGTAGTCAAAGGTCAGTATATCCCGGTGGTGATTGTCTGTGCTAGACCCCTGCTATT
TCCTGACCCCTAAATCCTCTTTAGGGACCCAGTCACTATACCCTGTCTATGCCCTGTGGGCTCCCAGACCCCTG
AGCTTTGAGTCAGTGGCCTACGGTTTGTAGCCTCAGGGGTCGGGCTGGGGGCTGATCATGCTGTGGTTAGT
GGACAGCAGCCACCCCTTGACAGCTACCTCTGGGCATCTCAAGGGCTTGACAGCCCACTGCTCCTTCTAACATT
TGTTGTGTTGTTTTGAGATGGAGTCTCGCTCTGTGCGCCAGGCTGGAATGAGTAGCAAGATTTCGGCTCACTG
CAACCCCGTCTCCCGGGTCAAGCGAATCTCTGCTCAGCCTCCGAGTAGCTGGGATTACAGGCAAGCACCA
CCATGCCTGCTAATTTTTATTTTTAGTAGAGTGGGTTTTCATCATGTTGGCCAGGCTGGTCTCGAACTCTGA
CCTCAAGTGATCCACTGCCTTGGCCTTTCAAAGTGCTGGGATTACAGGCATGAGCCACCGACCTGGCCCTCT
AAGCTTTTTTCATCATAGTCCCAAAAACCAACTTTTACAAGTGGTTTGGAAAGGCACCACTTTTGTGGCAGT
TCTGGTTGGGAGGGAGGTACAGTTTCTACTTCCCCCACCAGCTATGCTTCTGCTCTGAGAAGGTGGTTATTTA
TACAAACATGGACATACTCACTCCCAAGGGCTGATGAGATGCTGAATTTCTTTGGGGCACTCATTAATTGTCC
CAGCTGCAGCGACTGGAGCAAGCTGGAAGCTGCTGTGCTAAGACCACCCAGCTGTCCCTGGGTTCTCATCCTA
GGGCTCTTTTCTTCTCCAGGTACGGGGACCTGCTCAATGGAAGCAACTGAATTGAGGCTAGGAGAGGTAGGG
AGAGCTAGTTCTGACTTCACTGTGCAAGACTCTCTGCCCCATGTTACCTGGACTGGAACAGACTGTGAATAT
AGCAGAAGGTTCCAAGAACTCTGGTGTCTGACCTAGAAGAGGCACAGTCTCTCTACTGGAAAGAAAACGATGA
GCCGATTGCACAAGGGTGCCAAGGGAAGACCAGGATGGCCCATCAAAGAACCTGGGGGAGGATGCAGGAGGCT
GAAGGGATGCACTGGCATTCTCTCACTGTGCTCTTACCGCATCAGCAACCCCACTTTTGGGCTACTCTGC
CCCCATCGGTGAATACCCCTGATTGGATGCTGTGCTTTTCGGTTTGTCTCTAAGCCCCCTTCTCCAGGGCATGT
TGGTTTCCCTGGCTCTCAGTGTCTTAACCTGGAGCCCAAGTGCCTTGTACTGAGCCAGGAGACGGCTGAGCACT
GGCCCTCCACCTAAGCGTCTTTACATTAACTATTGGCTTGTATAAACACTGGTGCCATTGCCAAGTGGCT
GTGTCTCAGCTACAGAGCTGGAATTGTGTGGGTTTAGTGCTAAATACTTCAATAAAGCTGTTTTTGTGATT
GGCTG

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FIGURE 1210

MFWLGEGVTVPTPTSYASALRRWLFIQTWYISLPRADEMLNFLWGHSLIVPAAATGASLEAACAKTTQLSLGSH
PRAFFASRSDDLQ

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FIGURE 1211

ATGAAACTCTTCTACGAATGTGGGAAATGCAAAAAGGAATTGAAGGAAGGGGAAAAAATCTGAAGCCTGGAAAAACAT
ATTAAATCCCAGTGCTTTTACGCCCGGAAACAAAGAGACTAAGCCAGACTATGGGGGAAAGGGAGATAGAAGAGAT
CCTGGAACCTTTAAAGAGGGAAAGAGTGAGATTAGAAATCGCCAGGACTGGACTTTAAGGGACGTCCTGTGTGAG
CACAAAGGACTGGCACACACAGACACACGAGACCGAGGAGAACTGCAGACAAATGGAGATACAAAGACTTAGAA
GGACAGCTCCTTTACCTCATCTACTTGTCCAGAAAGTGTGGATCAGAACCCACCCCCATGCCACTATTAGA
GGCAGCCACGGAGGACGGAAGTGCCCTTTGGTTTCTCCGGACAGCAGTAGGGCCAGCTCGGTTCTGAGGCCACAT
GGGAGGTCTCGCGGAATTGAGAGATCCAATCTGGAGGAACCAACCTTCAGCCTCTCCAGAGAAGGAGGAGTGTG
CCCGTGTGAGACTAGCTCGCCCAACAGAGCCGCCAGCCCGCTCGGACATCAATGGGCGCCCGTGAGACCTGAG
CAAAAGACAGCAGCGAGGGGCTCTCCGCGTGAGATGATCAGAGATGAGGGGTCCTCAGCTCGGTCAAGAAATGTTG
CGTTTCCTTCGGGGTCCAGCTCTCCCAACATCCTTGCCAGCTTTGACGGGAAGAACAGAGTATGGGTCACTCA
GCCCTCATGCTTCGGAAGGCTACTACCGCTCATGATGAGCCTGCTGAAGGACGATGTGTACTGTGAGCTGGCG
GAGAGGCCATCCAACAGATTGTGCTCTTCCACCAGGCAAGTGAGGAAGGAGGCAAGGTGAGAAGGATCACCAGC
GAGGGCCAGATCCTGGAGAGCCCTTGGACCTTAGCCTCATCCCTAAGCTGATGAGCTTCTTGAAGCTGGAGAAG
GGCAAGTTTGGCATGGTGTCTGCTGAAGAAGACGCTGACGGTGGAGGAGCGCTATCCATATCCCGTTAGGCTGGAA
GCCATGTACGAGGTATCGACCAAGGCCCATCCGTAGGATCGAGAAGATCAGGCCAGAAGGGCTTTGTCCAGAAA
TGTAAGGCTCTGGTGTAGAGGGCCAGGTGGTGGCGGAGGGAATGACGGTGGAGGGGAGCAGGAAGGCCAAGC
CTGGGACGCGAGAAGAAGAAAGAGGACCAAGGAGAGCACAAGTCCCACCAACAGAGAGAGTGGGGTGAAGGTC
CTGAGAAAATCGGCCGCACTGCACCACTTTGCCCAACCTCCCTCAACCCCCAGAGCCACCCTTCTCTCT
GCCCAAGCCACAACAGTACTGCTGCTCCAGTCCCGGGCGGTAACAGTTGCTGCAAGACCTATGACCACCACTGCC
TTTCCCAACACGAGAGGCCCTGGACCCCTCACCTCCCAAGGCCCTTCAACCACTGAGGTGATCACTGCC
AGGAGACCTTCAGTTTACAGAAATCTTACCTCCATCCCGAAGGATCAGCAACGGGAGGCCACAGACAACC
AGGAGGCCACGAAGGCCACCACTTGGAGAGCTTCACAAATGCCCTCCCAACCACCTCTCAGAACCCAGCACA
AGGGCTGCTGGCCAGGCCGCTTTCCGGGACAACCGCATGGACAGGCGGGAACATGGCCACCGAGACCCAAATGTG
GTGCCAGGCTCTTCCAAGCCAGCAAGGAGAAACCTCCCAAAAAGAGGCCCAGGACAAAATTTCTAGTAATGAG
TATGAGGAGAAGTATGACCTCAGCGGCCCTACTGCTCTCAGCTGGAGGACGAGCTGCAGAGTCCCAAGAGTCA
GTGGCCGACCTGCTGGGGTCCTTTGAAGGCAAAAGAGACTCCTTCTGATCACTGCTCCAGGGCTGAGAACAA
ATGTATGTGCAACAACGTGATGAATATCTGGAAGTTTCTGCAAGATGGCTACCAAGAAAATCTCTGTGATCACC
ATCTTCGGCCCTGCAACAACAGCACCATGAAAATCGAACCACTTTCAGCTAGATAATGAGAAGCCCATGCGAGTG
GTGATGATGAAGACTTGGTAGCCAGCGTCTCATCAGCGAGCTGAGGAAAGATACGGAATGACCTCAATGAC
TTCTTCATGGTGCTAACAGATGTGGATCTGAGAGTCAAGCAATACTATGAGGTACCAATACCAATGAAGTCTGTG
TTTATCTGATCGATCTTTCCAGTCCCGAATCAAAGATATGGAGAAGCAGAAGAAGGAGGCGATTGTGCAAA
GAGGACAAAAAGCAGTCCCTGGAGAACTTCTATCCAGTTCCGGTGGAGGAGGAGGTGCTGGTGATCTCTGCT
CCTACGATGAAGACTGGGCTTATCAGAGCTCTCTGCCCTCAGTGGTCAGGCTGCAATTTTGGTCTGCGC
CACATAACCACTTGAAGCTTTTAGCGTTGGAGGGAAGTTGGGGAGTGTTAGAACTGTTCCAACTGTTCCAAATGAGG
AGCTCTGTTGTTGAGCGAGAAGACGTACCAGCCATTGGTGAAGACATTGCTAACTATTTCAAGTGAGCCCG
GAGTACTTCTCATGCTTCTAGTCGGAAGAGCGGAATGTCAAAATCCTGGTATCCTTCCCAATGTGGTCCATG
GTGATTTGTGACGATTTAATTGATCTGATGCAACTTCGGAGACAGGAAATGGCATTCAGCAGTCACTGGGATG
CGCTGCCAGAGATGAGTATGCAGGCTATGGTTACCATAGTTACCAACAGGATACCGAGGTGGTTACCGAGAT
GACTACCGTCATCATGAGAGTTATCCATGGATACCTTACTGA

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FIGURE 1212

MTWRMGPRFTMLLAMWLVCGSEPHPHATIRGSHGGRKVP LVSPDSSRPARFLRHTRGRSGIERSTLEEPNLQPLQ
RRRSVPVLRRLARPEPPARSDINGAAVRPEQRP AARGSPREIRDEGSSARSRLRFP SGSSSPNILASFAGKNR
VWVISAPHASEGYRLMMSLLKDDVYCELAERHIQI VLFHQAGEEGGKVRRITSEGOILEQPLDPSLIPKLMSF
LKLEKGKFGMVLLKKTQVEERYPPVRLEAMEVIDQGP IRRIEKIRQKGFVQKCKASGVEGQVVAEGNDGGGG
AGRPSLGSEKKKEDP RRAQVPTTRESRVKVLRLAATAPALFPQPSTPRATTLPAPATTVTRSTSRAVTVAARP
MTTFAFTTQRPWTPSPSHRPPTTTEVITARRPSVSENLYPPSRKDQHRERPQTTTRRPSKATSLSEFTNAPPTTI
SEPSTRAAGPGRFRDNRMDRREHGHDPNVVPGPPKPAKEKPPKKKAQDKILSNEYEEKYDLSRPTASQLEDELQ
VGNVPLKKAKESKKHEKLEKPEKEKKKKMKNNENADKLLKSEKQMKKSEKSKQEKEKSKKKGGKTEQDGYQKPT
NKHFTQSPKKSVADLLGSFEGKRRLLLITAPKAENNMVYQQRDEYLESFCKMATRKISVITIFGPVNNSTMKIDH
FQLDNEKPMRVDDDEDLDVQRLISELRKEYGMTYNDFFMVLTDVDLRVKQYYEVPITMKSVFDLIDTFQSRIKDM
EKQKKEGIVCKEDKKQSLNENFLSRFRWRRRLLVISAPNDEDWAYSQLSALSQQACNFGLRHITILKLLGVGEEV
GGVLELFPINGSSVVEREDVPAHLVKDIRNYFQVSPEYF SMLLVGKDGNVKSWYSPMWSMVIVYDLIDSMQLRR
QEMAIQQSLGMRCPEDEYAGYGYHSYHQYQDGYQDDYRHHESYHHGYPY

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FIGURE 1213

TTCTGGGAAGGGAGAATGGCGGCCCGGGCTGCGGCTGGGAGCGGGAAGACTCTTTGAAATGCCTGCGGTGCTA
GAGCGACTGAGCCGCTATAATAGCACGTCCCAAGCTTTTGCTGAGGTGCTGCGGCTGCCGAAGCAGCAGCTGAGG
AAGTGTCTGTACCCGCTGCAGGAAGTAGAGCGGTTCTCGCCCCCTACGGGAGGCAAGACCTTCACCTGCGGTATC
TTTGACCCCAAGCCCGGAGGACATAGCCAGGGCGGACAACATCTTCACGCGCCACTGAACGGAACCCGATCGACTAC
GTCAGCTCCGCGCTCCGTATCGACCACGCCCGGACCTTCGCGGCCAGAGGTGTGTTTATAGGCAGAAGCAAT
GTTGGAAAATCATCTCTAATCAAGGCTTTATTTTACATGGCCCTGAGGTGAAGTCAGAGTCTCCAAAAAACC
GGACACACAAGAAAATGAATTTTTTCAAAGTTGGAAAACATTTTACAGTGGTGGACATGCCAGGTTATGGCTTT
AGAGCACCTGAAGATTTTGTGACATGGTAGAGACCTATCTAAAAGAACGAAGGAACCTGAAGAGAACATTTT
TTAGTGGATAGCGTTGTTGGAATTCAAAAACAGACAATATTGCCATAGAAATGTGGAAGAATTTGCATTACCT
TATGTGATTTGATTAACAAAAATTGACAAATCTTCCAAGGGACATCTTTTAAAACAAGTGCTTCAGATCCAGAAA
TTTGTTAACATGAAAACCTCAAGGATGTTTCTCAGTTGTTTCTGTAAAGTGCTGTGACCTTTTCTGGAATCCAC
CTGTTGAGATGCTTTATAGCCAGTGTAACAGGAAGTCTTGACTAATGGTTCCCGGTTTAGCTGAAGATTCAAAA
AAAAAAAAAAGCTTTATGCTAACTGGAGTTAAATACCTAGAAGAATTTCAACATTTGTTTAAATGTTGTGCATC
TGTAACCTTCAGGAGGATCACTTGAGCTTTAAACCTGTGCCTTCTCGAAACAAGAATTTGTGCCTGAGGGTAAAA
AAGTTTGAAGTTATTGAATTTATGGTGTTTATTAGAACAGCTACTAGCTGATTCCCTATTTTAAACAACTGACA
AGAGCACATCCATAAATGAAAACCTGTTACAACATGTACAGAAGGGTTTGACGTTTTATTGGGCTTTTGTCTT
TTAAAGAATATGCTACTATGGGTATTTTTTTTTTAAATGTTAAATGGGCTAGGTAAAGGGGGCTGCTTTTCT
GTTAAGCATCGATAGGTAAGTTGATGGATAAAAGTTACTATGTAAGCCTATTTTTTTGAGTCCTTATTTGAATAT
TGAAAACATCTTGATAAAATGTGTTAGTCCATGTTGGAACAACCCGAAAGACAGAATTCAGGTTCTAGTTCTG
ATGTTTATTATATATGTTGGATCTTGGCAACTTACTTGATTCTCGGAAATTCATTGTTACTGTAAACGTGAA
AGCTATTAAAGATTCAAATGAATGGTTTTACAGCAGTAAACATGTGAGAAGACAGCTACATATTTGAAAGCAAA
CCAACAAGAAAATATAGCAAAATTCACAGGTAGATTTATTACAAGAAATGTCCTTTTCATGGGGGAAGTAAACATTT
TCACTAGTGAAAAAGCAAAAAACAAAAATAGCTTTAAGTGAGAAAACATATTT

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FIGURE 1214

TCGGAGAGGAAACAAGCTAGCTATGTGTGACTGGTGTCTTCTGGCTAATGGAACACTTAATGCATCCATCTCTTAAT
AGCCTTTATAATGAAAATTTGGTTAAAGAAGGAGTTTCAGCAGCTTTTGCTGTGAAGCTCTTTAAATCATGGATA
AATGAAAAGATATCAATGCAGTAGCTGCAAGTCTTCGGAAGTCAGCATGGATAACAGACTGATGGAACCTCTTT
CCTGCCAATAAGCAAAGTGTGTAACACTTCACAAAATATTTTACTGAGGCAGGCTTGAAAGAGCTTTCAGAAATAT
GTTCCGAATCAGCAAAACCATCGGAGCTCGTAAGGAGCTCCAGAAAGAACTTCAAGAACAGATGTCCCGTGGTGAT
CCATTTAAGGATATAATTTTATATGTCAAGGAGGAGATGAAAAAAACACACATCCAGAGCCAGTTGTATCGGA
ATAGTCTGGTCAAGTGTAATGAGCACTGTGGAATGGAACAAAAAGAGGAGCTGTAGCAGAGCAAGCCATCAAG
CACTTGAAGCAATACAGCCCTCTACTTGCTGCCCTTACTACTCAAGGTGAGTCTGAGCTGACTCTGTTACTGAAG
ATTCAGAGATTTGCTATGACAACATTCATTTATGAAAGCCTTCCAGAAAATAGTGGTGCTTTTTTATAAGCT
GAAGTCTGAGCGAGGAGCCCATTTGAAGTGGTATAAAGATGCACATGTCGAAAGGGGAAGAGTGTTTTCTCTT
GAGCAAAATGAAAAAGTTGTAGAAATGGCTCAAAAATGCTGAAGAAAGAACTCTGAATCTGAAGCTGAAGAAAGGTGAC
TGAATTTTGAACATACCCCTCAGTAAAGCAACAGGAGTTGTAGATAAAATGTCATGTCTCATGTGTCCTGGTT
CTTACATCTTCTACCTCCCTGTATCAAGCATGATATAAGGGCTTTCATGGCAAAATTTATTTAACTGTTTCTA
TGGTTGCTGGAAATGTTGGGTTTAGTTTTCTAAAACCATGTTTTAAGTAGCTACAGGAGCTATAGATTTGAATCTA
ATGTTGCATTAGTCTTTTCAGTTATCTTCTACCTCCTGTATTTTCTACTGTAAATATGTAATTTAAGGCCCTTCCA
CAATGAACAGTTCACTTTATTCCTGGGTTTTCTATAAACAGTTTTAAGGATATGATTTGGTTAAAAAATAATTT
GTTATAAAAAATCTGTTTGCAAAATTAACGTGAAAAAGTATCCAGAGTCTCAAAAGGCAATGATTTGTGAGATAAT
ATGGCATGCCCGAGCCCTGCTCATCAATGAAAAACCCATATGTAATAATCGAATTCATTTAACTGAATCTTGA
GTACGTGGACCATTGCTTGATGTTAACTTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTGTTTTG
TATCCTAAAGCTCAATGTTTTGGTCTCTGGTTTTTCATCCTTAGAGAAGCCATGGAGAACAGACTTGAAAAGTTTA
GGAATCATAAATGTGGCAGAGTGGTGGGAAGAAGAAAGTTTGAGCTTTTTCCCTTGTAGAACTCTCTGCATTTAG
TTTGTATCTTTCCAGGCAAAACAAATGGGTATTCTTTTCATACAACCATTTTCAAATGAACCTTAGAAAAGTCTT
AACATTTAAGGTATTTATGCACAGAAATACACTTAGATTGATAGGAAAGAACTCGTAATGGAGTTTGAGTAAAGA
AAATGACTGATGTACTAAACCCAGTAAAAATTTGTGAAAATGTTAAAGGTGAGTATGTTCTAATGGGAATCTAG
ATATAGCTTAGATTTCTCTATGGCTTAGAGTATTTGCTATAACAAATGAAGTGAATGACAATATATATTCTCTA
CTCGGTACATCTGGACTGGCTTCGTTCTCTTAACATACTCAGTAATGACTCAAGCCTTGGCTATTAAACATACCC
TAGTTGCCATTTTTAATTGCCATGAGCCAAATCTTCTGGTATACAAATGATCCATTTATTTAATGGCTGCC
TTTTCATTTTTCATCTTTCTTGCTGCTACCCATCTATGTATGTAGTCATTGGGGGGAAAAATGTAGCCACATTTT
TATGGGAAGACTTTGTGTTAAAGTGAACATTTTGAAGTTTTTAACTGGTGAACCTAGCCCTGGAATAATGCCAC
CAGAGACTGAGTGGAAATCGCCCCCTTTGAAGGTGCCATTCTTATGAGCCAAAAGTTTGTCATTTAAAAGTTTCA
TTTGGCGGAATAACATGTAATATAATTTGAAATAAAGGTATAGTAACCTTAAAAAGCAATATAAATGATTTGTT
GTGAATGGGGTGAATTTGTTAAATGAGTAACCTTTGATAAAGTTTTCTATGCACAGGCAAAATGATTACTAGTA
TTCTACGTAGTATCTGCTTTTACTTTTGTAAATTTGATGTTCTCAAAAGACTTTTTTTAAAAAATAAAGTCCA
TACTTACACTT

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FIGURE 1215

MLTGVLLANGTLNASILNSLYNENLVKEGVSAAFVAVKLFKSWINEKDINAVAASLRKVSMDNRLMELFPANKQSV
EHFTKYFTEAGLKELSEYVRNQQTIGARKELQKELQEQMSRGDPFKDIILYVKEEMKNNIPEPVVIGIVWSSVM
STVEWNKKEELVAEQAIKHLKQYSPLLAFTTQGQSELTLKKIQEYCYDNIHFMAFQKIVVLFYKAEVLSSEEP
ILKWYKDAHVAKGKSVFLEQMKKFVEWLKNAEEEESESEAEEDG

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FIGURE 1216A

GGCACGAGGGGATCGGCGGAGCTCCCACTCCGCTTACAGCTCGCTGCCGCCGTCTGCCCCGCGCCCCAGGAGA
CCTGGACCAGACCAGATGCTGGAAACGCTGGCTCGCTCGCGCTCGCGCTGGTGGCGGTGCGCTGGGTCCGCGC
CGAGGAAGAGCTAAGGACCAATCTCAAGATCTGTGCCAATGTGTTTGTGGAGCCGCCGGGAATGTGCAGTCA
AGAGAAAGGGAAACCCCACTGTCTCTGCATTGAGCAATGCAAACTCACAAGAGGCGCTGTGTGGCAGTAAATGG
CAAGCACTACTCAACCACTGTGAATGCATCGAGATGCTGCCTCACTGGATCCAAAATCCAGGTTGATTACGA
TGGACACTGTCAAAAGAGAAATACTCGTAAGTCAATCTGCCAGCCAGTTGTTTGTCTATCAGTCCAAACCGTATGA
GCTCCGACGTGCGATCATCTCAGTGGCTGGAAGCTGAGATCAITCCAGATGGCTGGTTCTCTAAAGGCAGCAACTA
CAGTGAAATCCTAGACAAGTATTTTAAAGACTTGTATAATGGTGATTCTCGCTGGACTCCAGTGAATTCCTGAA
GTTTGTGGACAGAAATGAACTGCCATCAATATTACAACGTATCCAGACAGGAGAACACAAGTTGCTTAGGGG
ACTCTGTGTGTGATGCTCTCATTGAACTGTCTGATGAAAAATGCTGATTGGAACCTCAGTTCCTCAAGAGTTTCTCAA
GTGCCCAACCCATCTTCAACCTCTCTGAGAAAGAGTGTGCCCTGGAGGATGAAACGTATGCAGATGGAGCTGA
GACCGAGGTGGACTGTACCCGCTGTGTCTGTGCTGTGGAATTTGGGTCTGTACAGCCATGACCTGTGACGGAAA
GAATCAGAAGGGGGCCAGACCCAGACAGAGGAGGAGATGACCAGATATGTCCAGGAGCTCCAAAAGCATCAGGA
AACAGCTGAAAGACCAAGAGATGAGCACCAAAAGAGATCTAATGAGGAGGCACAGACAGGTCTCGATCCAG
CATCTTCTCCACTTCAGCGCTGAGTTTCAGTATACACAAGTGTCTGTACAGTCGCCAAATCACCAGTATTTGCTT
ATATAGCAATGAGTTTTATTTTGTATTGTTTTTGTCAATAAGGATATGAAGTGTCTGGTGTGGAGGGAAGG
GCCACAGCCCTTCATTTCTAGGAGTGCTTTAAGAGAACTGTAAATGGTGCTCTGGGCTGGAGGCTAGTAAGGAA
ACTGCTACAGATTGAAAGAGGAACAGACCCAAATCTGAACCTCTTTTGTAGTTTACTGCATCTGTGACAGGCTG
CAGGGAGTGACACAGATGCCAGAGAGAATCTAGCAGGGTGTCCCGGAGGAGAGGTTTGGGAAGCTCCAGGAGGA
GGAACGCTCTCTGCTCCAGCCCTCTTCCATTGCGCTGACATGACAGACCTCCAGCATCCAGCATCTCTTGGT
CCCAATAACTGCCCTAGATACATAGCCACTACTGCTAGTTAACCCAGTGTCCCTCAGATCTGCTGAGGTTCTCTG
GGAGGTACACCCAAATGATGCAGATACTTGATATCTTTGAGCCCTTAGCGACCTAACCAAAATTTTAAAAATAC
TTTTTACCAAAGTGCTATTTCTCTGTAAACACTTTTTTTTGGCAAGTGACTTTATTTCTTCAATATTATCA
TTATATTATGTGTTTTTAAATTTTTATTTCTTGACTAGGTATTAAGCTTTTGTAAATATTTTTCAAGTAGTCCCA
CCACTTCATAGGTGGAAGGAGTTTGGGGTCTCTCTGTTGACAGGGGCTGAAATAACCCAGATGCCCCACCCCTGC
CACATCTAGATGACGCCCATAGTTGGCCCCCTAGCTTCCAGCATCCAATCTGCTCCAGGAGCAAGGGTGC
CTTAGACC GAAGCCAGGGGAAGAAGCATCTTCATAAAAAACTTTCAAGATCCAAACATTAAATTTGTTTTATTTA
TTCTGAGAAGTTGAGGCCAATCAGTATTTCCAAAGATGGCGACAGGGGACGCAAGGGCTTAGGATATCCCA
GCCTACCAATATGCTCATTGCTACTAATAGGAGGTTGAGTTGGCCCTGTCTCTTTTTCTGAGCCCTCAGTTT
CCTCAGTGAGCTGGTAAGAATGCACTAACCTTTGATTGTATAAGTTATAAATCTCTGTGGTCTGATCATTGGTC
CAGAGGGGAGATAGTTTCTGTGATTTTCTCTCTCTATAGAAATAAGAAATCTGTTACTAGAACAGAA
ATGCTAGCATGGCCCAAAACAGATGACCAGATTTGATCTCAGCCTGTGACTGACCTCAGGTCGTGCTATGATAGG
AGTCTCTCATGGTTAAAGCAGGAAGAGAGTGGGAAGAGAACCCCACTCTGCTTCATATTGCAATTTTCATGT
TTAACTCCCGCTGGAATAGAAAGCAATTCCTTAGAGATGAGGATAAAGAAAGTTTCAGATTCACAGGGGA
AGAAAATGGAGATTTAATCTTAAACTGTGACTTGGGAGGTCAGTCATTACAGTTATGCTCTGTGCTCTTCGAC
TTCTGTGATTTAATACCCCACTCACTACCCGTGTTTCAGATGCAATTTGGAATACCAAGATTAAATCCTTGACATA
AGATCTCAATTTGCAGAAAGCAATTTAAAGACCATCAGAAGGAAATTTTAGGTTGTAATGCATCCAGGCAACTGTG
AGAAACTGTTGTGCCAAAAATAGAAATCTCTCTAGTTTTCTTGTCTCATTTGAAAGGAGAAATTCACCTTTG
TTTAGCATTTCAAGCTTTTATGATTCATCCATCCCACTCTAAAACTCTCAAACTCCACTGTTCTGCTGACATGAACA
GCTCCCTGTCCAAGTGCTTTGGAGAATCAAGGACTCAGACGACGCTTAATCAAAGGTTTTACCAGCCCTTGGACACTA
TGGGAGGAGGGCAAGAGTACACCAATTTGTTAAAGCAAGAAACCAAGTGTCTCTTCACTAGTCATTAGAACA
TGGTTATCATCTCAAAGACTCTACCTGCAACATTGAACCTCCAAGAGCAAACTCACTTCCCTCTGAGTTCTG
CAGCTTCTGTGTAATAGGGCAGCTGTGCTATGCCGTAGAATCAGATGATCTGAGGACCATTCATGGAAGCTG
CTAAATAGCCTAGTCTGGGAGTCTTCATAAAGTTTGCATGGAGCAAAACAAAGAGTTAACTGAGTTTGGT
TCCTTCAGCCCTTAAAGATCAAGGCTTAGGCTGTGAGGCTTCCTTGGGCTTCTCTGTGTGTGTAGTTTGTAA
ACACTATAGCATCTGTAAAGTCCAGTGTCCATGGAAACATTCCCACTGCGGTGACTCTGGACATATACAGTT
TGTGAAGCAGGGTCTCTGCTGCTGCTCAACAGCCACGTGGACCATCTGAATGCTCTTCTCTTACACTCTGAT
TTTTAAGTAGTCAAACTCAAGAAACAATCTAAACAAGTTTCTGTTGCATATGTGTTGTGGAACCTGTATTGTGA

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FIGURE 1216B

TTTAGTAGGCTTCTATATTGCATTAACTTGTGTTTTGTAACCTCTGATTCTTCCTTTTCGGATACTATTGATGAA
TAAAGAAATTAAAGTGAAGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1217

MWKRWLALALVAVAVRAEEELRSKSKICANVFCGAGRECAVTEKGEPCLCIEQCKPHKRPVCGSNGKTYLN
HCELHRDACTGSKIQVDYDGHCKEKKSVSPASPVVCYQSNRDELRRRIIQWLEAEIIPDGWFSKGSNYSEILD
KYFKNFDNGDSRLDSSEFLKFVEQNETAINITTPDQENNKLLRGLCVDALIELSDENADWKLSFQEFLLKCLNPS
FNPPEKKCALEDETYADGAETEVDNCRVCACGNWVCTAMTCDGKNQKGAQTQTEEMTRYVQELQKHQETAECT
KRVSTKEI

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FIGURE 1218

CTCCCAAGATGTCGTTCCCAAAGTATAAGCCGTCGAGCCTGCGCACTCTGCCTGAGACCTCGACCCAGCCGAAT
ACRACATATCTCCGAAACCCGGCGGGCGCAAGCCGAGCGGTTGGCCATAAGAGCCCAGCTGAAACGAGAGTACC
TGCTTCAGTACAACGATCCCAACCGCCGAGGGCTCATCGAAATCCTGCCTTGCTTCGTTGGGCCTATGCAAGAA
CAATAAATGCTATCCTAATTTTCAGACCCACTCCTAAAAACTCACTCATGGGAGCTCTGTGIGGATTTGGGCCCC
TCATCTTCATTTATTATATTATCAAACTGAGAGGGATAGGAAGAAAACTTATCCAGGAAGGAAAATTGGATC
GAACATTTCACTCTCATATTAAGTCTGGCAATGATGACTATATGTATTCTGCCTAAATAAATCATCTATTAAAT
CATTAAAAA

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FIGURE 1219

MSFFKYPSSLRTLPETLDPAEYNISPETTRAQAERLAIRAQLKREYLLQYNDPNRRGLIENPALLRWAYARTIN
VYPNFRPTPKNSLMGALCGFGLIFIYYIIKTERDRKEKLIQEGKLDRTFHLST

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FIGURE 1220

GATGACACACAATAATTTTTGGTTGAAGAAGATAGAAATCAGTGTTCAGAAGCAGAAAAACGAACTGGAAGAAA
TGCCATGAACATGCAAGAAACATATACTGCTTACCTCATTGAAACAAGGTCAAGTTGAACATACCGATGGTCAGAG
TGTCTTAACGACTCCTATGCGCGGATATAGTGAATTTGAGTTGTGAGAAGCTACCTTTTAGTTTACTATCC
ACATATTTGTTGGCCACCTTGCCAGAAAAACGGGCAGAAATTTGTTGGCATAAACTCTCTGCTGACAACATGGA
TCCAGATTTTGTGGAGAGGCGACGGATTGGTTTAAAAAATTTCTCTTGAGGATTGCTTCACATCCCATCCTTTG
TAGAGACAAAATCTTCTATCTGTTTTAACACAGGAAGGTAAGTGAAGGAGACTGTGAATGAAACTGGGTTTCA
GCTGAAGGCAGACTCCAGGTTAAAGCGCTTAATGCAACATTCAGAGTGAAAAACCCAGACAGAGATTTACTGA
CCTTAAGCACTATAGTGATGAAGTCAGCTGTGTCATCTCACATCTTCTTCGAGTCAGAGCTAGAGTAGCAGATCG
ACTCTATGGTGTATATAAAGTACATGGGAATTTATGGTCGAGTTTTTCAGTGAATGGAGTGGCCATAGAAAAAGAAAT
GGGTGATGGACTGCAGAGTGCTGGTCATCATATGGATGTATGCACTCTTCTATTGATGATATTTTGGAAAGATGA
AGAACATTATGCAGATCAGTTAAAAAGATATCTTTTTATGCAGAAGCATTGCGGGCTGTGTGCAGGAAACATGA
ACTTATCGAGTATGACTTGGAGATGGCTGCTCAGGACTTAGCATCCAAGAACGAGCAGTGTGAGGAACGTGTAAC
TGGGACTGTGAGAACATTTCTTTTGAAGGGAATGACTACCAAGCTCTTTGGTCAAGAACTCCAGAGCAGAGAGA
AGCCAGAAATAAAGGTGCTAGAAGAACAAATAAATGAAGGAGAACACAGCTAAAGTCTAAAAATCTGGAAGGCAG
AGAAATTTGTAAAAACCGCATGGGCTGATATTGAACGCTTCAAGAAACAAAGAACCCGAGACTTAAAGGAGGCCCT
CATAAGCTATGCAGTCATGCAGATCAGTATGTGCAAAAAGAGTCTCACCTGTCAACCGGCTGGAGTGCAATGG
CATGATCTCAGCTCACTACAACCTCCGCTCCCGTGTTCAGCAATTCACCTCATCCAGCCGAGTAGATGGGAT
TACAGGGAATTCAGTTTGGACCAATGCTAAGGAATGCTTTAGCAAGATGTAATCCTGTGAATGAAATTTCTCTT
CAATCAAAAGTGCCCCAAAACAGAGACAAAGTAAATAAAAGAAATTTAAGTCACTACCTAGTATACATAAACATA
TACATAAGTTAAATAAATTCAGCTTTCTTTAACTTAATTTGGTGTGTTAATGTAGCACAAAAATATATTTT
AATGAAGATTAAATATTATAAATTTGAGGTTTTGGGGACTGGTGCTGATTCAAAAAGTTAATTTAATAATATA
CCAACAGATGTTTGTACGCTTCTGAACCAATGACTGAATGTCAAGATGTCGTTAATTTCTAGATGTTTGTGTT
CAAGACCAGCTGTTTCAGATCTATTAATGTAGGGAATTTTCCCTAAGATTGAATTCCTATATTTACTTGGTAAG
ATCCACTAATCTGTTATAGGGAGTTGTTTTCTCTTGCTTATAGTTGAGCTATTTGGTTTGACAAAGCTCAGCAG
AAACTTGATGTGAAAAATCTACGATTTCTTCTACATTCATTGATGCCCTTGTAAATGTTTGCATACACTAGAAA
ATGCCTTCAATTTGTGTTTTACCAGAAATTTGATATGCTCAGAAATTTTATATCTGCCAACAAAGAGCTCAAC
TTCTCAGATCTATAATGGGATACATTTGCATCCTTAGCAACTCCTATATAGAAAGTTTTAACTGAATATGTTAC
ATATAAGAATTAATTTCTTCTCAATAATTTCTTAACCTCAGTAATGAGCCTAAATTTACTCTGCTTGGCTCTCTA
CACATGGCAATTCAGGGTATAAGATGTAGCATTTCAATGTGTAAGATATATGTACTAAACATATGTGTTGCTATC
TTCATCATTAACTCCTCTTTTCTATTGCTTGGCTGTAATTTTGTAAAGATAAATATATATGTTTTTGTAT
GTGTGTTTGTAGTATATGTCAGAAGGCAAGCATCTTCATTTTGCTAGCTTTGCAGAACTTAAATGTGTACTC
GTTATTTCTAATGTATGAAAAAAATCCCTAGTCTGTGTTAGCAATTTGACTTTTATATGTTTTAAATGTTGC
TGGATTTTGTGCTGTTTGCACAACTTATACAATAAATAAATGAAATATGTGCTG

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FIGURE 1221A

GCAATTTTAGAATGTGCTGGACAAAATGTAGAAAGGGAATGTTCTCAGCAAGCTCAGCAGCGCAAAAATGATTAT
ATAATCACC GGAGGTGGATTTT GAGGTGCAAGAAATATCATTCAATGTAATGGTGGAAATGATGTCAAGAGTTCA
GTTTCCCTCTGTTTGCAGGAGGTGCAAAAAAAAATTACTCATCCATTGGCTCCAGCCATTGGGACAGGAAAT
GCCAAACAAACCCAGATGAAGTTGCTGAAGCCATAATTGATGCCATTGAAGACTTTGTCCAGAAAGGATCAGCC
CAGTCTGTGAAAAAGTTAAAGTTGTATCTTTCTGCCCTCAAGTACTGGATGTGTTTTATGCCAACATGAAGAAA
AGAGAAGGACTCAGCTTTTCTCCCAACAGTCTGTGATGTCTAAACTTGCATCATTTTGGGCTTTTCAAGACAA
TCTCCCAAAAAAGAATCATTTGGTTTTGAAAAAGAAACAGAAACAGCAACTTTTCCGGTGTGTGGTGAATAAT
GTCACGTGTGTGGAATATGTCTATCTCTGGCTACAAGACCTGATTGAAAAGAACAGTGTCTTACACCAGTGAA
GATGATGCATCAAGAGCTTTGATGAAAAGGAGTATCAGGAGTTGAATGAGCTGCAGAAAGTGTAAATATTAAC
ATTTCCCTGGACCATAAGAGACCTTTGATTAAAGTTTTGGGAATTAGCAGAGATGTGATGCAGGCTAGAGATGAA
ATGAGGCGATGATCAAGAGAGGTTTCGATTGGGCAAGAACAGGAATCCCGGGCAGATTGTATCAGTGAAGTTTATA
GAATGGCAGTATAATCGACAATAACACTTCTCATGTGTTTTAACAAAATGACCAATCTGAAATTAGAGGATGCAG
GGAGAGAAAAAGAAAAACAGTTGATGTCAAATTAATCATCGGCACATACAGTGAACCTTGAACACATACACTG
CCACAGACACAAAGGGCCACAGTTTATCTGTTCAGCGCCTCAGGAAATCCAAAGTTGACATCCCTGCACACTGGA
GTGATATGAAGCAGCAGAAATTTCTGTGTGGTGGAGCTGCTGCCTAGTGATCTGAGTACACACCGGTGGCAAGCA
AGTTTAACTCAGACCTGCTCACACTTCAGAATAGAGAAGATTGAGAGGATCCAGAAATCCAGATCTCTGGAATAGCT
ACCGAGCAAGAAAAAAACTATGGATGCCAAGAAATGGCCAGACAAATGAATGAGAAGCAACTCTTCCATGGGACAG
ATGCCCGCTCCGTGCCACAGCTCAATGAAATGGCTTTAACCGCAGCTATGCCGGAAGAAATGCTGTGGCATATG
GAAAGGGAACTTATTTGCTGTCAATGCCAATTAATCTGCCAATGATACGTACTCCAGACCCAGATGCAGAAATGGGA
GAAAGCATGTGATTAATGTGCGAGTACTTACTGGAATCTATACACATGGAATCATTCATTAATGTGCTCCTTT
CAAAGAACCTTCAAAATCCTACTGACCTGTATGACACTGTCACAGATAATGTGCACCATCCAAAGTTTATTTGTG
CATTTTATGACTACCAAGCATACCCAGAGTACTTTATACGTTAGAAAAAATCAACTTTGGTATCCTTCCACAA
AATTAATCTCCATTGTACATATCTAGTTGTAAACAAAGTTTTAGCTTTTTTTTATTAATCCTCTTAACAGATTT
TTCTAATAATCAAGGATATCTTTGTGCTGAAGTCACTTTCTTCCAGCTTCCCTTTTATTAATGGAATGAAC
TTATATCTTGAGAGCAATAACTTGGAAAAATTTAAATGAGATAATGCAGTTGCAACTGTGTGTCCCAAGTATG
GACATCAAATCTGTGGGAAAAAGAACAGGTTTGTATTTTCAGGAAGGAGAGAAATAACAGTCTTATAGACAGAGGC
ACAGCTAAAGCAGCTGCCACTGCAGGAGACAGGCCCATGTGAGGATGCCATAGTGTCTGTGGGAGCAGCAGTAT
TACCCAGTGGGTAGGGCTTCTGTCTTCCCTGGGAGCAGGAGTGGTATCTTAGTCAATTTTTTCCCTTGAGATGA
GGTCTGTGGCTGATGTACAACCGGATATCCATAAATGTTGACAAACACGAAAGTGAAGAAAAAGCTGAGTCA
CCATGCCATCCAAAGTAGGAATATCTCTTTAACATTCTTGACTCACTATCACTTTACCTCAAATTCGACAGATT
CCAGCAGGGAATCTTACTTTACAAACTAGCCAGTGACATGTGGGACAGCTCTGGCCAGGCTGTGGGACTGCA
GTGATCTTGCCTCTGCACGCTGCAGAGCTGTGATGTGGCTGTGCTTAGGGGAAATCTTGCCTGCCCTTAGGAG
TTGCGCAGCACAACCTTGGCTCAATGCCAGAAAGGCTCTTTTAAATGCTGAACCAAAATGTGCTCTTTTTTTT
TTTTTTTGAGATGGAGTTTCACTCTTGTGGCCAGGCTGGAGTGCAATGGCGGCTCTCAGCTCACTGCAGCCAC
TGCTTCCAGGTTCAAGTGATTCTCTGCTCAGCCTCCCGAGTAGCTGGGATTACAGGCATGCGCTTAACACACC
CAGCTAAATTTGTATTTTGTAGAGACGAGGTTTCTCATGTCTGCAGCAGCTGGTCTCGAACTCCCACCTCAGC
TCCCAAACTGTGGGATTACAGGTGTAGCCACCGTGACACAGCAATGTGCTTCTATAGTGTCTACTCATTTG
GTCTTTGTTCTGCCAGTGAACAATGGGATAACGCTGTACACATCTTCATTGTGAAACCCCTCCCTGTGTC
TGAGATTAAATGAACCTAAGATTATTAATAGTATATTTTCTTGCAGCGCTAGCGTTTGTGATTAATTAAGCC
TTATGATAAATAAACCAAAGAGTAAGCAGTCATATGCTAATTTTGTCTAACTCCTATCTATTGAATGGTGAAG
TTTTAAAAATTTCCCCAGGTAAAGTTTAAAGATTCAACACCATCTATTGAGCAGCTACATTGTGTGCCAGGTAGTA
AAATAGGTGCTTTTATACACATTTGTCTCAATTCTGTGAGGTGAGAAATATCTCTGCAATTTGAACTTGAAGAAA
CATGCTCAGAGTGCAAGAAAGCTTCTTGCCTGAGATCACTGAGAAAGGAACCTCAGAGCCGGAACCTGAAATCTT
GGTCCCTGTGATGTCAAGCCCATTTGCTCTCCACTGCAGAAATAGGCCCTCATGATTAATGCCACCGATTCAAGAA
CACCCTCGAGCTCTTGAATAACCCCATGTTGCTTTGTTTTTTTCTTCTGCTGCTTCTTATTACAGTCTC
TTCACTGGAAGCTCTGTAGGCCAAGGCCAGAGCTGATGATGACACGGAGCCAAATGAGATGAGCATGAGATGCT
AGGGGTGCTGGGAGGATTAAGGCTTAATCTGCTAGGAACACCTGATCTGAAGTGGAGGAGGCTAGGCGGCC
ACAGTTGCTGCTTATTAAACATAGAGGTTTTTGATTTTTTCTCTTGTGTTTTTTTAAAGTGGATTGCGAGA

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FIGURE 1221B

CTCCTTGTTGCTTAAGAGTGGCTTTCTAGGCAGGCCACTGGCATCTGAATTCATCATTGACAATAAAATGTAAGAA
ATTGGAATAAAAAGAGAGACCTGCTGTTATTGCGCTTTTGTTCTCCAGTGATTGATTAACTCAGGGCAAGGCTG
AATATCAGAGTGTATCGCACTGAAGAATAATAATCCATTGTAATGTTATAGTTATCCTCAATCTAAATATGTC
AACTGTCATTTTGCTACTTTTCAAAATAAAATACTTGAAAACGTGC

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FIGURE 1222

MKKREGTQLSSQQSVMSKLASFLGFSKQSPQKKNHLVLEKKTESATFRVCGENVTCVEYAI SWLQDLIEKEQCPY
TSEDEC IKDFDEKEYQELNELQKKLININISLDHKKRPLIKVLGISRDVMQARDEI EAMIKRVRLAKEQESRADCIS
EFIEWQYNDNNTSHCFNKMTNLKLEDARREKKKTVDVKINHRHYTVNLNTYTATDTKGHSLSVQRLTKSKVDIPA
HWSDMKQQNFCVVELLPSDPEYNTVASKFNQTCSHFRIEKIERIQNPDLWNSYQAKKKTMDAKNGQTMNEKQLFH
GTDAGSVPHVNRNGFNRSYAGKNAVAYGKGT YFAVNANY S ANDTYSRPDANGRKHVY YVRVLTGIYTHGNHSLIV
PPSKNPNPTDLYDTVDNVHHPSLFVAFYDYQAYPEYLITFRK

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FIGURE 1223

GAATTCGGGGGGCGCCGGAGTGGAGAAAAGGAGCCAGCGGTGGGCAGCGCTGCTGGGATGCGCGGGCCGGGCGCG
CGTGGCTGCTGCTGGCAATCTGGGTGGTCTGCCATCATGGCTGTCTCTGCAAAGGTCTCCTCGCTCATTGAGA
GAATCTCTGACCCCAAGGACTTGAAAAAACTGCTCAGAACCCGGAATAATGTACTGGTGCTTTACTCCAAATCTG
AGGTGGCAGCTGAAATCATCTCAGGTTACTGTCCAGTGGGCCAGGCGGTGAAAGGACAAGGGACCATTCTGCT
GGGTGGACTGTGGTGATGCAGAGAGTAGAAAAATTGTGCAAGAAGATGAAAGTTGACCTGAGCCCCGAAGACAAAA
AGGTGGAATTATTCCATTACCAAGGATGGTGCATTTCACTAGTAATATAACCGAGCTGTGACATTTAAGTCCATAG
TGGCCTTTTGAAGGATCCAAAAGGGCCCCCACTGTGGGAGGAAGATCCTGGAGCCAAAGATGTTGTCCACCTTG
ACAGTGAAAAGGACTTCAGACGGCTCCTGAAGAAGGAAGAGAAGCGCTCCTGATCATGTTTTATGCCCCCTGGT
GCAGCATGTGCAAGAGGATGATGCCGCAATTTCCAGAAGGCTGCGACTCAGCTGCGAGGCCACGCCGTGCTGGCCG
GGATGAATGTCTACTCCTCTGAATTTGAAAACATCAAGGAGGAGTACAGCGTGC GCGGCTTCCCCACCATCTGCT
ATTTTGAGAAAGGACGGTCTCTGTTCCAGTATGACAACATATGGGTCCACAGCTGAGGACATTGTGGAGTGGCTGA
AGAATCCGACGCCGCCACAGCCCCAGGTCCCTGAGACTCCCTGGGCAGATGAGGGCGGCTCCGTTTATCACCTGA
CCGATGAAGACTTTGACCAGTTTGTGAAGGAACACTCCTCTGTCTCGT CATGTTCCAGCCCCATGGTGTGGCC
ACTGTAAGAAAATGAAGCCGAGTTTGAGAAGGCAGCAGAAGCCCTCCATGGAGAAGCGGATAGCTCTGGTGCC
TTGCAGCTGTGATGCCACTGTCAACAAGGCCCTGGCAGAAAGATTCCACATCTCAGAGTTTCTACGTTGAAGT
ATTTTAAGAATGGAGAGAAATACGAGTGCCTGTGCTCAGGACAAAGAAAGTTCCTCAGTGGATGCAAAACC
CTGAGGCCCCCCCCCCCCAGAGCCACGTGGGAAGAGCAGCAGACAAGCGTGTTCACCTGGTGGGGGACAAC
TCCGGGAGACCTGAAGAAAGAAACACACCTTGGTCA GTTCTACGCCCTTGTGCCACACTGTGAAGAGG
TCATTCGCACTTTACTGTACTGCTGATGCCTTCAAGA TGACCGAAAGATTGCCTGTGCGGCTGTTGACTGTG
TCAAGACAAAGAACCAAGACCTGTGCCAGCAGGAGGCGGTCAAGGGCTACCCCACTTTCCACTACTACCACATG
GGAAGTTCGCAGAAAAGTATGACAGCGACCCGACAGAAATTGGATTACCAATTATATTCGAGCCCTCCGGGAGG
GAGACCATGAAAGACTAGGGAAGAAAGGAAGAGTTATTAATTCTGCTCAGAAAAAGCTTTCCATTACACTG
TGAATGATACCTGTTTGTGTTTCTGAATTTCCCCGAATTC

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FIGURE 1224

MARAGPAWLLLAIWVVLPSWLSSAKVSSLIERISDPKDLKLLRTRNNVLVLYSKSEVAENHLRLSTVAQAVK
GQGTICWVDCGDAESRKLCCKMKVDSLSPKDKKVELPHYQDGAFHTEYNRAVTFKSIVAFLKDPKGPPLWEEDPGA
KDVVHLDSEKDFRLLKKEEKPLLIMFYAPWCSCMRMPHPQKAATQLRGHAVLAGMNVYSSEFENIKEEYSVR
GFPTTICYFEKGRFLFYDNYGSTAEDIVEWLKNPQQPQPQVPETPWADEGGSVYHLTDEDFDQFVKEHSSVLVMF
HAPWCGHCCKMKPEFEKAAEALHGEADSSGVLAADVATVNKALAERFHISEFPTLKYFKNGEKYAVPVLRTKKKF
LEWMQNPEAPPPPEPTWEEQQTSVLHLVGDNFRETLLKKKHILVMFYAPWCPHCKKVIPHFTATADAFKDDRKIA
CAAVDCVKDKNQDLCQGEAVRGYPTFHYHYGKFAEKYDSRTELGFTNYIRALREGDHERLGKKKEEL

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FIGURE 1225

CTCAGACTGCTGTGCTAGCAATCAGTGAGACTCCGTGGGCGTAGGACCCCTCTGAGCCAGGTGCGGATATAATCT
TGTGGTGCGCCGTTTTTTAAGCCGGTCCGAAAAGCGCAATATTCGGGTGGGAGTGACCCGATTTCACAGGGCTGT
GACCATCTATGACAAGCCGGCATCTTTCTTTAAAGAGACACCTCTGGACCTGCTGCACCCGGCTCTTCATGAAGCT
GGGTGGCACTCACTCTCTGTTTCAGGGGCTGCTCAGAACCTGAGGACGACGCCATGGAGCGGTCGGCCTTCATGGA
GCTGGATGCTGGGAGCAGGCTGGTGATGCATCTCCGCGAGTGGCCAGCCCTGCTGGTCAGCAGCACGGGCTGGAC
AGAGTTGAACAACCTTACTCTTGATGGACACAACCTTCCTTCTCTTGCTGTGTGATAACAGGGTCGGTGGACCT
GGGTGTCGTCTGCACATGTCTCCAGTGGCCTGGACCTGCCCATGAAGGTGTTGGACATGTTTCGGGTGCTGTTT
GCCTGTGTGTGCCGTGAACCTCAAGTGTTTTACATGAGCTGGTGAAACATGAAGAAAATGGCCTGGTCTTTGAGGA
CTCAGAGGAACTGGCAGCTCTGCAGATGCTTTTCTCAAACTTTCTGATCCTGCAGGCAAGCTAAACCAGTTTTG
GAAGAACCTGCGGGAGTCGCAGCAGCTCCGATGGGATGAGAGCTGGGTGCAGACTGTGCTCCCTTTGGTTATGGA
CATACAACTCCTGGGCCAGAGGCTAAAACCCGGGACCCCTGCTGTCTTCCCAGCTTCTTCTCGGAGTCTCA
GGGCAAAACCTTTTGAGCAGCGCCTCCAGTGGCCAGAAGCTGAAATGACGGCAGTGGTGCCGCTGGTGAATGA
ATTGGTTCTGTACCCGG

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FIGURE 1226

MKLGGTHSPFRACSEPEDAAMERSAFMELDAGSRLVMHLREWPALLVSSIGWTEFEQLTLDGHNLP SLVCVITGS
VDLGVC LHMSS SGLD LPMKV VDMFGCCLEPVC AVNFKCLHEL VKHEENGLVFEDSEELAALQMLFSNFPDPAGKLN
QFWKNLRESQQLRWDESWVQTIVLP LVMDIQLLGQRLKPRDPCCP SRFFSESQ GKPF

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FIGURE 1227

GCAGACACGIGATGCGGGGGAGGGGGGGGGGCGTGGCAGGAGCAACGCTCTGCCGCGGTGGCCGGGTGCCGGTA
AGGGTTTCCAGCGCCCCCGGCTAGGTTTTGGAGCGCGGGGAATGCGTTTCGTGCTCAGTGTCCGACTTCCCCCT
ATTCCTCATCGGCCGAGGCTGTCACTTTACGCTCATAACCGTTTTTCTTTACTGCACCTCGTTCGGGAGGAAAGGG
ACTTGGCTGGCACCCCGACACCTCCCCGCTCCGCTTCCACGTTTGGTACATCTCGCTGAGGCAGGAAGCCGCA
GCTGAGGGGACGGCTGTCTGTACGGTGGGATGGTGGCTGCGAGGCTCATTTCAGCAAGGAACAAGGCTTT
CCCCCTTTGATTTTATAAATATTATGTTTTACAAGCTGTAATATATAGAAATTGATAAGACGTGTCCCTGTCCCT
GGAAACGCAGGCACCGCGTGTGGAAAGACATTCACTGCGGTGTTTGACAGACTCCCCAGTGTGTGCCATGCT
CTGTGCTTAGGGAACGTGTGAGACCCCTGGAGGGGTGGGTACCGGGACCGCACTCAGCTGGGGTTGGAGGGCGG
CTCCATAGGAAGCGACCTGGGACCTAAGATTTTAGACTGACTGTGGGTTCCTGGAATAAAAAGGAAGAAACA
AAGAGCATTGCAGGCATCGGGACTGTCACTTTGACAAGATCAAAGCTGCAGGAAAAATGGACAGTGAGGTTTCAGA
GAGATGGAAGGATCTTGGATTGATTGATGATGCTTGGCGAGAAGACAAGCTGCCTTATGAGGATGTCGCAATAC
CACTGAATGAGCTTCTGAACCTGAACAAGCAATGGTGGCACCAGAAATCTGTCAAAGAACAAAGAAATGAAGT
GGACAGACTTAGCCTTACAGTACCTCCATGAGAATGTCCCCCATTTGGAACCTGACGCTTGGCTCCTTTCTTGT
GGATGGATTTTCTCAAAGTACACAGATAAAGCATGGTTTGTTCAGTCTCAAATTCAAACCTTTGAGTAATAAA
TCAGCACTCAAAATGTACACCCATTAGTTTGTGGTAGCAAAGTGAATGCGAAATTTGAATGAGAACTGAGAT
TTCTCAGTAATGGTGAATATTTGCGCTCTTTAAACCTAAACCTCTTCAATGAGTAGCTTATTTGAACATGATTG
GTTAAACATTTGCTCTACCTCTGATTTTGTCTTTCGTCGTCAGAGTTTAAACCTTCCAACTACTTATGTGTGCC
TGTAACACAGGTGATTGAACGTATGAGAGGGAAGGCAAGAAAAAGGAAGCCAGACACTAGGAGAATTTATTAAC
TTCTCATACTTCCCCACATTGAGAAGCAITCGGAGTGTATTTAGCCTGTAGATGTTGTGATATGCAAAATATCCCA
TTCCCTGGTTACTGGCATTCTTAAGATTTCTCATGTATTTTCAAACCTTGGATAAATTTACAGATTAGAAGAT
ATCTGACAGTTAATCTCTGTCTCTTACAAATTCCTTTTGTGCTGCTGGAAGGATCTTTGGCTAGGTGGATGA
CTAGTTTTTATTCAAAGCCTTTTCTCAAAGCCTTTTCAGTTACAACACCCCACTATGGAATCAGTATTTAGTTAT
ACATTTGTATAAGAACCTGTATTTTGAAGAACACATTATGATATTTATTCTCGGAATTTATTGCTGTGTTAAAC
AGTGCTTTTCATGTCTCTCCCGAGATTGTAAACTCTGTAAGAAGCTGCTTGTATCTGTATCCCTTGTGTAACCT
CTGAAAACACTGAATAACTAAATCTCTCTCATCCTTTT

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FIGURE 1228

MRGRGGGRGRSKRLPRWPGACKGFQRPRPRFWRRGNFVAQCRTSPYSHRPRLSLYAHNRFSLLHSCREERDLRG
TPRPPRLRFHVWYILPEAGSRS

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FIGURE 1229

AGTGGCGGAGGAGTCTGTGCTATGCTATGCGCGGAATCATCGGAATCCTTCACCATGGCATCCAGCCCGGCCAG
CGTCGGCGAGGCAATGATCCTCTCACTCCAGCCCTGGCCGAAGCTCCCGGCGTACTGATGCCCTCACTCCAGC
CCTGGCCCTGACCTTCCACACTTTGAGGATGAGTCCGAGGGGCTCTTAGGCAACAGGGGCCCTGGAGGAAGAA
GAGGATGGAGGAGAGCTATTGGAGATGGCATGGGAAAGGGACTACCGGCCATCCAGAGCTGGACGCCATATGAG
GCCGAGGAGCTGGCTCTGGATGATGAGGACGTAGAGGAGCTGACGCCAGTCAGAGGGAGGCGAGCAGAGCGGGCC
ATGCGGCAGCGTGACCGGGAGGCTGGCCGGGGCTGGCGCGCATGCGCGTGCGCTCTGTATGACAGCGATGAG
GAGGACGAGGAGCGCCCTGCCCGCAAGCGCCGCCAGGTGGAGCGGGCCACGAGGACGCGCAGGAGGACGAGGAG
ATGATTGAGAGCATCAGAACTCGGAGGATCTCAAAGGCCACTCTGTGCGCGAGTGGTGAGCATGGCGGGCCCC
CGGCTGGAGATCCACCACGCTTCAAGAACTTCTGCGCACTCACGTGCAGCCAGGCCACAGCCCAACGCTTCAAG
GAGCGCATCAGCGACATGTGCAAGAGAACCGTGAGAGCCTGGTGGTGAATATGAGGACTTGGCAGCCAGGGAG
CACGTGCTGGCCCTACTTCTGCTGAGGACCCGGCGGAGCTGCTGCAGATCTTTGATGAGGCTGCCCTGGAGGTG
GTACTGGCCATGTACCCCAAGTACGACCGCATACCAACACATCCATGTCCGCACTCTCCACCTGCCTCTGGTG
GAGGAGCTGGCTCGCTGAGGACGCTGCATCTGAACAGCTGATCCGACCCAGTGGGTGGTGACCAGCTGCAT
GAGGAGCTGGCGCTCGCTGAGGACGCTGCATCTGAACAGCTGATCCGACCCAGTGGGTGGTGACCAGCTGCAT
TCCCAGAACAGGAGGTGAACACAGGCTCTGTCTGAGTGCCAGTCCGCGGGCCCCCTTTGAGGTCAACATGGAG
GAGACCTATCTAGAACTACCCAGCTATCCGAATCCAGGAGAGTCCAAGGAGAGTCCAAGGAAAGTGCGCGCTGCC
CGCTCCAAGGACGCCATCTCTCTGCGAGATCTGGTGAGCAGCTGCAAGCCAGGAGACGAGATAGAGCTGACTGGC
ATCTATCACAACTATGATGGCTCCCTCAACACTGCCAATGGCTTCCCTGTCTTTGCCACTGTCTATCTAGCC
AACCACGTGGCCAAAGAGGACAAAGGTTGCTGTAGGGGAACTGACCGATGAAGATGTGAAGATGATCATAGC
CTCTCCAAGGATCAGCAGATCGGAGAGAAGATCTTTGCCAGCATTTGCTCTTCCATCTATGGTCATGAAGACATC
AAGAGAGGCCCTGGCTCTGGCCCTGTTGCGAGGGGAGCCCAAAACCCAGGTGGCAACGACAAAGTACGTGGTGAT
ATCAACGCTGCTCTGTGCGGAGACCCCTGGCAAGCGAAGTCGAGTTTCTCAAGATATATTGAGAAAGTGTCCAGC
CGAGCCATCTTCACTACTGGCCAGGGGGCGTGGCTGTGGGCCCTACGCGCATGTCCAGCGGACCCCTGTCTAGC
AGGGAGTGGACCTTGGAGGCTGGGGCCCTGGTTCTGGCTGACCGAGGAGTGTCTCATATGAAATTTGACAAG
ATGAATGACAGGACAGAACCGATCCATGAGGCCATGAGGACACAGAGCATCTCCATCTCGAAGCTGGCATC
GTCACCTCCCTGCAAGCTCGCTGCACGGTCATTGCTGCCGCCAACCCCATAGGAGGGCGCTACGACCCCTCGCTG
ACTTTCTCTGAGAACTGGACCTCACAGAGCCATCATCTCACGCTTTGACATCCTGTGTGGTGAGGGACACC
GTGGACCGAGTCCAGGACGAGATCTGGCCGCTTCTGTGGTGGGCGAGCCAGTCAGACACACCCCGAGCAACAG
GAGGAGGAGGGGCTGGCCAAATGGCAGCGCTGCTGAGCCGCCCATGCCCCAACGATGCGCTGGAGCCCTGCC
CAGGAGGCTCCGAAAGATACATCTACGCCAAGGAGAGGCTCCACCCGAAGCTCAACAGATGGACGAGGAC
AAGGTGGCCAAAGATGTACAGTGACCTGAGGAAAGAAATCTATGGCGACAGGCGAGCATCCCCATTACGGTGGCGAC
ATCGAGTCTGCTGTCGCGATGGCGGAGGCCACCGCGCGCATCCATCGCGGACATATGTGATCGAAGACGAGCTC
AACATGGCCATCCGCGTGATGCTGGAGAGCTTCATAGACACAGAAAGTTCAGCGTCATGGCGAGCATGCGCAAG
ACTTTTGGCCGCTACCTTTTCACTCCGCGGTGACAAATGAGCTGTGTCTCTTCACTAGAGCAGTTAGTGGCA
GAGCAGGTGACATATCAGCGCAACCGCTTTGGGGCCAGGAGGACACTATTGAGGTCCTGAGAAGGACTTGGTG
GATAGGCTCTGTCAGATCAACATCCCAAACTCTCTGCATTATATGACAGTGAGCTCTTTCAGGATGAACAAGTTC
AGCCACGACTCTGAAAGAGAAATGATCTCTGACAGAGTCTTGGGCCCTATGAGGCTCCATCAAGGATTTGGGAT
TCTGGTTTGGGGTGGTCAGTGCCCTCTGTGCTTTATGGACACAAACGAGCACTTGATGAATCTGGGCTACTA
GGGTCAAGGCTTATAGCAGGATGTCTGGCTGCACCTGGCATGCTGTTTGTCTTCCAGACCTGCTTTGTGCTTC
TCACTTTTGGTGAGGATGCTTTCAGTGTGCTTACTTGGTGTGACACATCTTGGCACCTCCGAGTGCTTTGT
CTCCACTCAGTACCTTGGATCAGAGCTGCTGAGTTGAGGATGCTGCTGTGGTTAGGTGTTAGCTTCTTACA
TGGAATGTCAGGAGAGCTGCTGCCCTTGGCTGAGTTGCGTATTCAGGCTGCTTTTGTGCTTTCGGCAGAGA
GCTGGTTGAAGATGTTTGAATCGTTTTCAGTCTCTTGCAGTTTCTGTGCCCCCTGGTGGAAGTGGCAGCAGC
AGTGCCAGCGCAGCGTTCTGGGCTCTTCAGTGCAGGGGGTGGGATGTGAGTCATCGGATATTCATCCGACACA
GTTATCAGCTGCCATTGCTCCCTGTGTTTCCCACTCTCTATTATTGTGCAATCGGTTTGGTTTCTGTAGTTT
AATTTTAAATAAGTTGAATAAATAAT

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FIGURE 1230

MAESSESFTMASSPAQRRRGNDPLTSSPGRSSRRDALTSSPGRDLPFFEDESEGLLGTEGPLLEEEEDGEELIGD
GMRDYRAIPELDAYEAEGALDDEVEELTASQREAAERAMRQDRDREAGRLGRMRGLLYDSDEEDEERPARK
RRQVERATEDGEEDEEMIESIENLEDLKGHSVREWVSMAGPRLEIHHRFKNFLRTHVDSHGHNVFKERISDMCKE
NRESLVVNYEDLAAREHVLAYFLPEAPAEELLQIFDEAALEVVLAMYPKYDRITNHIHVRI SHLPLVEELRSLRQL
HLNQLIRTSQVVTCTGVLPLQLSMVKYCNCKCNFVLGFFCQSQNQEVKPGSCPECSAGPFVEVNMEETIYQNYQR
IRIQESPGKVAAGRLPRSKDAILLADLVDSCKPGDEIELTGIYHNNYDGS LNTANGFFVFATVILANHVAKKDNK
VAVGELTDDEDVKMITLSLKDQQIGEKIFAS IAPSIYGHEDIKRGLALALFGGEPKPNFGGKHKVRGCD INVLVCGDP
GTAKSQFLKYIEKVSSRAIFTTGGASAVGLTAYVQRHPVSRWLEAGALVLADRGVCLIDEFDKMNDDQRTSI
HEAMEQQSISISKAGIVTSLQARCTVIAAANP IGGRYDPSLTFSENVDLTEPIISRFDILCVVVDTVDPVQDEML
ARFVVGSHVRHHP SNKEEEGLANGSAAEPAMPNTYGVPEPLQEV LKKYIIYAKERVHPKLNQMDQDKVAKMYS DL
RKESMATGSIPI TVRHIESMIRMAEAHARIHLRDYVIEDDVNM AIRVMLESFIDTQKFSVMRSMRKT FARYLSFR
RDNNELLLFILKQLVAEQVTYQRNRFGAQD TI EVPEKDLVDKARQINIHNLSAFYDSELFRMKNF SHDLKRKMI
LQQF

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FIGURE 1231

ACCATGGGCCGGCTGCTGCGGGCCGCCGGCTGCCGCCGCTGCTTTGCGCGCTGCTGCTTCTGCTGGTTGGGGGA
GCGTTCCTGGGTGCCCTGTGTGGCTGGGTCTGATGAGCCTGGCCAGAGGGGCTCACCCTCCACCTCCCTGCTAGAC
CTCTCTGCTGCCCATGGCTTGAGCCACTGGACTCAGAGGAGCCTAGTGAGACCATGGGCCCTGGGAGCTGGGGCTG
GGAGCCCTTGGCTCAGGCTTCCCCAGCGAAGAGAATGAAGAGTCTCGGATTCTGCAGCCACCACGACTCTCTGG
GAAGAGGAGGAAGAGCTGAATGACTCAAGTCTGGACCTGGGACCCACTGCAGATTATGTTTTCCTGACTTAAC
GAGAAAGGCAGGTTCCATTGAAGACACCAGCCAGGCTCAAGAGCTGCCAAACCTCCCCTCTCCCTTGCCCAAGATG
AATCTGGTTGAGCCTCCCTGGCATATGCCCTCCAGAGAGGAGGAAGAGAGGAAGAGGAAGAGGAGGAGAGGGGAG
AAGGAAGAGGTAGAGAAACAAGAGGAGGAGGAAGAGGAGGAGCTGCTCCCTGTGAATGGATCCCAAGAAGAAGCC
AAGCCTCAGGTCGCTGACTTTTCTCTCACAGCAGCAGCCAGACCCAGGGGCCACCAAAAGCAGGCATGAAGAC
TCCGGGGACCAAGGCTCATCAGGTGTGGAGGTGGAGAGCAGCATGGGGCCAGCTTGCTGCTGCCTTCAGTCAAC
CCAATACAGTGACTCCGGGGGACCAGGACTCCACCAGCCAAGAGGCAGAGGCCACAGTGTGCCAGCTGCAGGG
CTTGGGGTAGAGTTCGAGGCTCCTCAGGAAGCAAGCGAGGAAGCCACTGCAGSAGCAGCTGGTTGTCTGGCCAG
CACGAGGAGGTGCCGGCCTTGCCCTTCATTCCTCAAACACAGCTCCAGTGGGGCCGAGCACCCAGATGAAGAT
CCCCTTGGCTCTAGAACCTCAGCCTCTTCCCCTGCGCCCTGGAGACATGGAAGTGAACCTTCCTCTGCTACC
TTGGGACAAGAAGATCTCAACCAGCAGCTCCTAGAAAGGCGAGGCAGCTGAAGCTCAATCCAGGATACCTGGGAT
TCTACGCAAGTGATCTGAAGGACTGGAGCAATCTGGCTGGGAAAACTACATCATTTCTGAACATGACAGAGAAC
ATAGACTGTGAGGTGTTCCGGCAGCACCGGGGGCCACAGCTCTTGCCCTTGTGGAGAGGTGCTGCCCGCCAT
GGCAGTGGCCACCATGGGGCCTGGACATCTCTTGAGCAAGCCAGCGAGAAGGAGCAGCACCCTCTCATGACA
CTGGTGGGCGAGCAGGGGGTGGTGGCCACTCAAGATGTCTTTCCATGCTGGGTGACATCCGAGGAGCCTGGAG
GAGATTGGCATCCAGAACTATTCCACAACAGCAGCTGCCAGGCGCGGGCCAGCCAGGTGCGCAGCGACTACGGC
ACGCTCTTCGTGGTGTGGTGGTTCATTGGGGCCATCTGCAATCATCATTCATTGCGCTTGGCTGCTCTACAACCTG
TGGCAGCGCGGGCTGCCAAAGCTCAAGCACGTGTCGACGCGGAGGAGCTGCGCTTCGTGGAGAACGGCTGCCAC
GACAACCCCAACGCTGGACGTGGCCAGCGACAGCCAGTCGGAGATGACGAGAGAAGCACCCAGCTGAACGGCGGC
GGGGCCCTCAACGGCCCGGGGAGCTGGGGGGCGCTCATGGGGGGCAAGCGGGACCCCGAGGACTCGGACGTGTTT
GAGGAGGACACGCACTGTGAGCGCAGCGAGGGCGCAGGCCGAGTGGGCCCGCAGGACCAAGCGAGGTGAACCC
GAAACGGACGGCCCGGAGCCCGACACAGCCCGCGCTACCCGGGCCGCCCGCGGCTTGGCCCTCGGCGGGG
CTCCTTCCCCTTCCCCGACTTCACAGCGCGCTTCGGACCAATCCCTCACTCCCGCCCGAGGGGCGGCGCTC
AAGCCCGCTTGGCCCGCTTCCCAGCCCTGAACCCGCGCCCGGGCGGCGGCGGCTTCTGCGCCCC
GGGACTCAATTAAACCGCCCGGAGACCAAGCGCGGCCAGCG

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FIGURE 1232

ATTTTACCTGATGCTATGAGAGAATCATATTGAAGATGAAATGTCTAATATATAATGTATATTTAAAGCAGAGA
CTATTTTGGTGGATAGGTGGGAGGGAGCAAGGGGAGTTTGAGGGAATCAGAGCTTGATGCTACTGTACAGAACTG
GACAGGTGGGCCGCGCAGTGGTGGGGCCAGAGGGCTCTGTGCTCTAGGAGCTAAGCCAGCAGCCCCGAGAGGGG
ACTTGGCTGGGCCTTTCTATGGGCAAGGCCAGTGTCTTCTGCCACCAGGGACCATGGAGCAGTGGCAACC
TATGGGGCTATGATCCCTAGGCCTGGGCCTGGGCCTGCCATGGCCCCAGAGCTACCCTGGGAGTGTCAGTGCTAG
CAGCACAGCTACCTCTGGTGGCAGGAGAAGAGAGGCCAGCACAGCAGCAGGCCAGGCCCTTCTGTCCAGGTCTG
CATGGAGCACTCGGTGACCCAGAGCAGGGACTGGAGGCACCCCCAGCCCTGCCCCAGGCCACAGCAGGACAGGCC
GGGACAGGCCTCACCCAAAGGCCAAGGCTGGCATCAGCCAATCATTAGAGCTGAGGCCCTGGGCCTAGCCTGCC
TTCTCAGGTGCCAATACCAACCCAGCCCTGCCCTTGGCCTCACITTTTCCAGCAATAAGTGGGGTTCACCAACC
GCCTCGGGAATACTTTCCCTTCTAAATGGGACTTGCTGTTACCTCAGGAGGCTCCTTAGTGCAATATGACCCCT
GGTCAGGGCTTTGCCACCGTTGAAGCCCTGCAGAAAGGTGCAATGTAGGGGTTCTGGGGCCACAGAGGAGAGGCCA
CTTCCACACAGGACCCCAACATGAAGTCTAGGCCTCAGGGGCTCCCGCCCTTCTTCTCCAGCAGCGGGAACCTG
CCACTGCTCTCCAGGCCCTGTTCTGGAGGCTAACCTTGTTCTTGAGAGTGTGCCCTCCACCTCCCTCCAG
CAGCCCTGATCACACCATGAGAGCCAGGAACGGGTACCCCTGCTGAAGATCACTCTGTGCCCTGGGGGAGGAGCC
AAGCCCTCACCCACAAGGGGCAGGTGGGGGCTTGGTGTGACCCGGCCCAAGTCCCCACAGAGCACTTCTGT
AGCTCCAGCTTGCTCCCTGG

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FIGURE 1233

MAQSYPGSVSASSTATSGGRRREAQHSSRPLPVQVCMEHSVTQSRDWRHPQPCRPQQDRPGQASPKAKAGISQ
SFRAEALGLACPSQVPIPPQPCPWPFFPAISGVHHPPREYFPLLNGTCCYLRRLLSANMTLVRLPPLKPCRRC
NVGVLGPQRRGHFPPGPPT

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FIGURE 1234

CTGCAGACGAGGCAGGCGGAAGAGGCGGGACTTCGCGGGTGACGTCATCGGGGCGCCGGAGGCCCGGGCGCCTG
GGAATTTGAAGCAAAACAGGCAGCGCGGACAAATGGCGGTGCGTCGTGACAGCTTTGGGGCCATTGGTGACGGGTCT
GTACAGCGTGCAGGCTTTCAAGTTTGGGACTTCGTGCTGAAGAGCGGGCTTTCTCCCCATCTACATCGATCT
CGCGGGCATCGTGTCTCGACC CGGTCTTCGTGAGTCAGGTTGCAGATATTTTATCCAACTGCCCAAAATGCAGG
CATCAGTTTACACCGGTGTGTGGAGTGCCCTATACAGCTTTGCCATTGGCTACAGTTATCTGTTCAACCAATCA
AATTCCAATGCTTATTAGAAGGAAAGAAACAAAGGATTATGGAACATAAGCGCTCTGTAGAAGGAACATTAATCC
AGGAGAAAACCTGTTTAATCATTTGAAGATGTTGTACCAGTGGATCTAGTGTTTTGGAACCTGTTAGGTTCTTCA
GAAGGAGGGCTTGAAGGTCACGTGATGCCATAGTCTGTTGGACAGAGAGCAGGAGGCAAGGACAAGTTGCAGGC
GCACGGGATCCGCCCTCCACTCAGTGTGTACATTGTCCAAAATGCTGGAGATTCTCGAGCAGCAGAAAAAGTTGA
TGCTGAGACAGTTGGGAGAGTGAAGAGGTTTATTACAGGAGAATGTCTTTGTGGCAGCGAATCATAATGGTTCTCC
CCTTTCTATAAAGGAAGCACCCAAAGAACTCAGCTTCGGTGACGTGCAGAGCTGCCCAGGATCCACCCAGTTGC
ATCGAAGCTTCTCAGGCTTATGCAAAAGAGGAGACCAATCTGTGTCTATCTGCTGATGTTTCACTGGCCAGAGA
GCTGTTGCAGCTAGCAGATGCTTTAGGACCTAGTATCTGCATGCTGAAGACTCATGTAGATATTTGAATGATTT
TACTCTGGATGTATGAAGGAGTTGATAACTCTGGCAAAATGCCATGAGTTCTTGATATTTGAAGACCGGAAGTT
TGCAGATATAGGAAACACAGTGAAAAGCAGTATGAAGGAGGTATCTTTAAAATAGCTTCTCGGGCAGATCTAGT
AAATGCTCAGTGGTGCCAGGCTCAGGAGTTGTGAAGGCTGCAAGAAGTGGGCCCTGCCTTTGATCGGGGGTG
CCTCCTTATTGCGGAAATGAGCTCCACCGGCTCCCTGGCCACTGGGGACTACACTAGAGCAGCGGTTAGAAATGGC
TGAGGAGCACTCTGAATTTGTTGTTGGTTTTATTTCTGGCTCCGAGTAAGCATGAAACCAAGAAATTTCTTCACTT
GACTCCAGGAGTTCAGTTGGAAGCAGGAGGAGATAACTTGGCCAAACAGTACAATAGCCCAAGAAGTTATTGG
CAACGAGGTTCCGATATCATCATTTAGAGTCTGTGGCATAATCTCAGCAGCTGATCGCTGGAAGCAGCAGAGAT
GTACAGAAAAGCTGCTTTGGGAAGCGTATTTGAGTAGACTTGGTGTTTGAGTGCTTCAGATACATTTTTTCAGATAC
AATGTGAAGACATTGAAGATATGTGGTCTCTCGAAAGTCACTGGCTGGAATAATCCAATTATTCTGCTTGGGA
TTCTTCCACAGGGCCCTGTGTGAAGATGGGTCTCGGAGTTCTCATGGCTTTAGGAAAATTAGTAGTAATTTGTAAT
CACCGCAITGATACTATAATAAGTTCATTCTTAAGCTTGCTTTTTTGAGACTGGTGTTTGTGTAGACAGCCACAG
TCCTGTCTGGGTTAGGGCTTCCACATTTGAGGATCCTCTCTATCTCCATGGGACTAGACTGCTTTGTTATTCT
TATTTATTTTTTAATTTTTTTCGAGACAGGATCTCACTCTGTGCCCCAGGATGGAGTGCAGTGGTGAGATCACGG
CTCATTGCAGCCTCGACCTCCAGGTGATCCTCCCACTCAGCTTCAGATTAGCTGGTGCTATAGGCATGCACC
ACCGGCTCCATCTAAATTTCTTTATTATTGTAGAGATGAGGTCTTGCCATGTTACCCAGGCTGGTCTCAACTCC
TGGGCTCAAGCGATCCTCTGCCTCAGTCTCTCAAAGTGTGGGATTACAGGTGTGAGCCACTGTGCCCAAGCCTA
ATTGCAGTAAGACAAAAATTTAGGGCACCAAGAGGCTAAAGTCAGCAGACGTTTTCTGTGTCTGCTGATT

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FIGURE 1235

CTCGGGTCTGGTGGCTGCCGGCCCTGCGGCATCTCGCCATCGGGGAGCACGGAGAGCAGCGAGGGCCGCGAGGGTGT
CCTTCGGAGTGGACGAGGAGGAGCGGGTCCGGGTGCTGCAGGGTGTCCGGCTGTCTGAAAAACGTGGTGAACCCGA
TGAAGGAGCCCAGCTCTCCACCCCTGCTCCACATCTTCTACCTTTGGCCTTCAAGATGGCAACTTGAGAGCCC
CTCACAAGAATCCACACTGCCAGGTGCGGGAGCAGTGGTGGCCAGCAGCCCTCAGGGATGAAGGAGGGTGTCA
AGAGGTATGAACAGGAGCATGCTGCTATCCAGGATAAGCTCTTCCAGTGGCAAAGAGGGAAGAGAGGGTGCCA
CCAAGCACTCCAAGGCATCCCTGCCACGGGCGAAGGCAGCATCAGCCATGAGGAGCAGAAGTCAGTCCGGCTGG
CCAGGGAGCTGGAGAGCAGAGAGGCAGAGCTAAGACGCCGTGACACCTTCTACAAGGAGCAGCTGGAGCGTATTG
AGAGGAAGAATGCTGAGATGTATAAACTGTCTTCAGAGCAATTCATGAGGAGCCTCAAAGATGGAGAGCACAA
TAAAGCCCCGCGAGGGTGGAGCCCGTCTGCTCAGGGTTGCAGGCCAGATTCTCCACTGCTACCGAGATCGCCCCG
ATGAGTGCTGCTGTGCTCGGACCTGGTCAAGGCATACCAGCGCTGCGTGAGCGCCGCCACAGAGGCTCGAGGAG
CAGACATCATTCCTGCCCCCTGGCAGTGACTTGGAGCCCTGAAGAAGGGACCAATCATGGGACCACAGCCACTGTG
CCCTGCCGTTTCCCTGCTGGGCCCTGCATATGCCCTGAGCCTGGGGCTGCCACGTGTTTAGGAAACAAAGTATG
CGCTACTGTCTGAAAACAAATAAAGCAGATGCCTTTGTTCAGTCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAA

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FIGURE 1236

MGSTESSEGRVVSFGVDEEERVRVLQGVRLSENVVNRMKEPSPPPPAPTSSTFGLQDGNLRAPHKESTLPRSGSS
GGQQPSGMKEGVKRYEQEHAAIQDKLFQVAKREREAA TKH SKASLPTGEGSISHEEQKSVRLARELESREAE LRR
RDTFYKEQLERIERKNAEMYKLSSEQFHEAASKMESTIKPRRVEPVCSGLQAQILHCYRDRPHEVL L CSDLVKAY
QRCVSAAHKG

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FIGURE 1327

GAGAGTGGCCAGCGAGGGCAGCGTTTCGCCGCCCTCAGGCCCGTCCCGCGCGCAGCCGCGCTTCGCTTCGGTT
TGTGAGCAGGCCCGCCGCGGGCAGGAGCGAGAGCGAGACTCTGGAGCGGTCCGCGCCGCGAGTCCGCCGGGCGGG
AAAGCGGGCGATGCCCCAAACCGCGCTCGGGCCATGTCCGAGGGCGCGGTGTGTCGCCGCCGGGCGCG
TCCCGCGCTGTGCTCCCGCGGGCCAGCGCTCGTCCGAGGCCGCGAGGAGTGCGCCCCACCTCGTGGGCT
CATCGAGCGCAGCCGGGTGGTGTATCTTCAGCAAGAGCTACTGTCCCATAGTACTCGGGTGAAGAAGCTCTTTTC
TCTTTGGGATCGAATGTATGTCTTGAACCTTGATCAAGTTGATGATGGGGCCAGGGTTCAAGAAGTCTGTCT
AGAAATCACTAATCAGAAAAGCTGTGCCAATATTTTCGTGAATAAAGTGCATGTAGGTGGATGTACCAAACCTT
CCAGGCATATCAGAGTGGTTTGTACAGAAGCTCCTTCAGGAAGATTGGCATATGATTATGATCTCATCAT
CGGTGGTGGTTCTGGAGCCCTTCATGTGCGAAGGAAGCTGCCATTTTGGAAAGAAAGTTATGTGTCTAGACTT
TGTGTGCCGTCACTCAGGGCAGCATCTCGGGGTCTTGGTGGCACCTTGTGTAATGTAGGTTGTATTCTTAAGAA
ATTGATGCACTAGGCTGCCCTTTTGGGGCAGGCATTATGTGACTCAAGGAAATTTGGCTGGGAATATAATCAACA
AGTGAGGCACAACCTGGGAGACAATGACAAAAGCGATTAGAACCACATCAGCTCTCTAAACTGGGGCTACAGGTT
GTCTCTGAGGGAAGGGCTGTGGCCATATGCAATTCCTATGGAGAATTTGTTGAACATCATAAAATAAAGCAAC
CAATAAAAAAGGACAGGAGACTTATTATACTGCTGCACAGTTTGTATAGCAACCGGTTGAAAGGCCACGGTATT
AGGAATCAAGGAGATAAAGAACTACTGTATTACTAGTATGACCTTTTTCTCTGCCCTATTGCCCTGGCAAAAC
ATTAGTGGTGGTGCCCTTATGTTGCCCTGGAGTGTGAGGGTTCTGGCTGGCTTTGGCTAGATGTACAGT
TATGGTACGCTCAATCCTTCTCCGTGGCTTCGACCAAGAAATGGCAGAAAAAGTGGGTCTCTACATGGAGCAGCA
TGGTGTGAAGTTCCTACGGAATTCATACCTGTGATGGTTCAACAGTTGGAGAAAGGTTACCTTGGAAAGCTGAA
AGTGTGGCTAAATCCACTGAAGGAACAGAAACAATTGAAGGAGTCTATAACACAGTTTGGTTAGCTATTGGTCG
TGACTCTGTACAAGGAAATAGGCTTGGAGAAGATTGGTGTCAAATTAATGAGAAGAGTGGAAAAATACCTGT
AAATGATGTGGAACAGACCAATGTGCCATATGTCTATGCTGTGGTATATTTTGGAGGATAAGCCAGAGCTCAC
TCCTGTGCCCATACAGTCAGGCAAGCTGCTAGCTCAGAGACTTTTGGGGCTCTTTAGAAAAGTGTGATTATAT
TAATGTTCCGACTACAGTGTTTACTCCTCGGAGTATGGTTGCTGTGGATTATCTGAAGAGAAAGCTATTGAAGT
ATATAAAAAAGAGAACTAGAAATATATCATACTTTGTTCTGGCCCTTGAATGGACAGTAGCTGGCAGAGAGAA
CAACACTTGTATGCAAGATAATCTGCAATAAATTCGACCATGATCGGGTGATAGGATTTCATATTCTTGGACC
AAACGCCGTTGAGGTTACCCAAGGATTTCGAGCTGCAATGAAATGTGGGCTCACAAAACAGCTACTTGTATGACAC
CATTGGAATTCACCCCATATGTGGGGAGGTGTTCACGACTTTGGAATTCACAAAGTCGTAGGACTAGACATCAC
TCAGAAAGGCTGCTGAGGCTAGGCCCTGTCTGTGTTAGTTCTCTCTGTATATCTCAATTCTCTCAAAGATAAG
AATGCTCTCGGATAAAATGAGCCTGTGCTCATGACAGCTGCTGTGTTACTCAGGGAACAGTGCAGGGCTGTCTTA
CGACACTTAGATGAGAAAGTAGACAAGGAAAGAGGACAGCAGTGGGCATCTGCCCTTGTGTCTTGTCTGACAGCGA
GAAGCAGTGGGACTGCTTCTTGAACGCTTAGCTTGGAGCCCGTTATGAGGTGAGCCAAAGGCTGACTCTCGCAA
GCCAGGACTGAGCTTCCCTCGGAAGACCTTTGAGTGGCAACCATTCACCTAAGTTAGCTTTCTGTGCTGCTATTG
TTTTTATCCCTTTGCTTTGTTGTTCTGTGAAATATATTTTCAGTTAAGAAATGCTATAAAGTAGTGGTTTTC
TAGTGTGGGGCTAGAATTACACATGCTCACTGGTGAACAGTGTCTGTGGGCTGTGTGGGCTGATTTGGAT
AGCTGTGTCATTAGCAGGAAGCTGTACACACTGTGTAGGGTTAGTCATCTCTTTTCTTTTGGAGGCACATTTA
ACCTACTGTCAAAACGCTGACTCATGCTTACCCTCACACTCAGTCTGGTGGTGATAACCTTGAAGCTATTCT
CCCTAATTAATATCTCGAGACTGAGCAAAATATCTCATGTAAGATAAAGTACTTGAATGCTTTTCACTGTTTC
ATCTTAATAGTATTATTTCCAAAAGTTTTAATACTGTATTATGTGAATCTAACAATTTATCTGTGAAATAAT
TCCATCAGCTGTGTTTAAATGATGATAAAGTTCATAAATGAATACAGGT

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FIGURE 1238A

AGCGATCCGAGGCCGCGCCCGGCCCGGCCCGGCCGCGCCGCGCGCTTGCCGCGCGGGCTAGCACTGACGTGT
CTCTCGGCGGAGCTGTGTGTGACGTGGAAACGCGCTGGGCGCGGGGACGCGTCGCCCTCACGCGGACGAGAGCTGAGC
TGAAGCGGGACCCGGAGGCCGAGTACGCGCCGCCCTGCGCAATCAAATTTCTGGAAGTCATCAAGCCCTCTGTGT
CATCTCGCCGGAATTCAGAAGCCAGAGAGGAAGATTACGTTTAAGGAGAAAGTGCTGTGGACCGCTATCACCCCT
CTTTATCTCTTAGTGTGTGTCAGATTCCCTGTTTGGGATCATGCTCTTCAGATTACAGTGCACCCCTTTCTATTG
GATGAGAGTGATCTTAGCCTCTTACAGAGGACATTGATGGAGCTAGGGATCTCTCTATTGTACAGCTGTGGCCT
TATAATGCAACTCTTGGCTGGCCCAAGATAATTGAAATTGGTGACACCCCAAAGACCGAGCTCTCTTCAACGG
AGCCCCAAAGTTATTGGCATGATCATTACTATCGGCCAGTCTATCGTGTATGTGATGACCGGAGTATGTGGGA
CCCTCTCGAAATGGGTCTGGAATTTGCCGTGCTAATCACCATTACGCTCTTTGTGTGGCTTAATTGTCCCTACT
TTTGGATGAACCTCTGCAAAAAGGATATGGCCTTGGCTCTGGTATTCTCTCTTCATTGCAACTAACATCTGTGA
AACCATCGTATGGAAGGCATTACGCCCACTACTGTCAACACTGGCCGAGGAATGGAATTTGAAGGTGCTATCAT
CGCACTTTTCCATCTGCTGGCCACACGACAGACAGGTCGAGGCCCTTCGGGAGGCGTCTTACGCCAGAATCT
TCCCAACCTCATGAATCTCATCGCCACCATCTTTGTCTTTGCAGTGGTCACTATITTCAGGGCTTCGAGTGGGA
CCTGCCAATCAAGTCGGCCCGCTACCGTGGCCAGTACAACACCTATCCCATCAAGCTCTTCTATACGTCCAACAT
CCCCATCATCTGTCAGTCTGCCCTGGTGCCAACTTTATGTCACTCTCCAAATGCTCTCAGCTCGCTCTCAGTGG
CAACTTGTGTGACGCTCGCTGGGCACTTGTTCGGACACGCTCTTCGGGGGCCAGCACGTGCTTATCCAGTTGG
TGGCCTTTTGCTATTACCTGTCCCTCCAGAATCTTTTGGCTCCGTTTGAAGAAGCCGGTCCATGTCAGTTGTATA
CATAGTGTTCATGCTGGGCTCCTGTGCATCTTTCTCCAAAACGTTGAGTGTAGGTTCTCCTGCAAGAA
TGTGCAAGACGCTGAAGGACGACAGATGGTGTAGAGGCCACCGAGAGACTCCATGGTCCATGAATCTCAA
CCGGTACATCCCCACAGCCGCGGCCCTTTGGTGGGCTGTGATCGGGGCCCTCTCGGTCTGGCTGACTTCTTAGG
CGCCATTGGGCTTCGGAACCGGATCTCTGCTCGCAGTACAATCACTACCAGTACTTTGAGATCTTCGTTAAGGA
GCAAAAGCGAGGTTGGCAGCATGGGGCCCTGCTCTTCTGAGCCGCTCCCGGACAGGTTGAGGAAGCTGCTCCA
GAAGCGCCTCGGAAGGGGAGCTCTCATCATGGCCGCTGCTGCTGCGGCATATGGACTTTTAATAATGTTTTTGA
TTTTGATTTCTTTTCACTTCCACTGTGAAAAGTGCTAGACATTTTCCAATTTAAAATTTTGGCTTTTATCTCGGCA
TGGCAAAAAGAACTGTGAAAGTGAATTTTATTCAGCCGACTGCCAGAGAAGTGGGAATGGTATAGGATTGTCCC
CAAGTGTCCATGTAACCTTTTGTTTTAACCTTTGCACTTCTCTAGTGTGTATGCGGCTGCAGCCGCTCTCACTGT
TTCCCCACAAGGGGAATTTCTCACTCTGTTTGGGAAGCACAACACTGAAATGTCTACGTTCTATTTTGGCAGTAG
GGTGTGAAGCTGGGAGCAGATCATGTATTTCCGGAGACGTTGGGACCTTGTGGCATGTCTCTCTCAAACTCAGG
CGTGGGAATATCTTGGCTTAGGACTGTTTCTCTCTAAGACACCAITGTTTTCCCTATTTTTAAAAGTGATTTTTTT
AAGGACAGAATCTCTTCCAAGAAGAGGGATGGCTTTCCGAAGACACTCTGGCCATCTGTGGATTGTGCTGT
GCACCTTATTGGCTCTCTTAGCTCACTTCTTCTGGTGGGCTTAGAGTCTGCCGTTTCTGCTAGTCTCCGTTGTTAG
TCCACTTTGGGTCATCAGCTCTGCAAGCTGAGCCTGGCCAAGCTAGGTGGGACAGACCTTCAGTGTAGTGTGCTGT
TGTCCAGATTCTGCGGACTCATCACTGGACAGCTCTCTCGCAGCTGCCCTAGCAAGGGGAGACATTTGGGTAGCT
ATCAGCATGGACAGAACTGACTTATGTGCTCAAGCCCTACACCTTCTGGGCTGAAGATCAGGACTACCCAGGTGT
TCAGAAATTTTCTACTGTGCTTAGGACTGCACGAAGTGAGCAGACACCACCGACTTCTTTCTGCGTACCAGT
GTGCTCAGCAGAGAGGAGCAGACAGGCTCAAGGTTGTGTAGTGAAGTCAAGTTCTGGGGTGCATGGGCTGTGGTG
GTGTGATGATTTGCTCCAGTGTTTGAATAAAGAAGCTCATGTTTATGTCTGGAATAAGTCTGTTTGTGTGTA
CAGGTGGCTTAGTCTCTGGAGATGAGCACCTCTCTTGGCCTTTAGGGAGTCCCTCTTAGGACAGGCACTGCC
CAGCAGCAAGGCCACGAGTTGGTGCTAAGATCTGAGGAGCTCGAGGTTTCGAGCTGGCTTTAGACATTTGGT
GGGACCAAGATGTTTTTGCAGGATGCCCTGATCCTAAGAAGGGGGCTGGGGGTGGCTGCAGCCTTCTCGGGGAGA
CCCCACTCTGAGCTGGGACACGCGCAGCTTCAAAAGCAGAGGGCCACCGCCACAGCCCGGACAGAGGGGACACT
CTGGAGACTTGCCTGGCAGTGTACCGAGGAACAGAGTGACCAAGGGAAGAAGAGGACTTGGCTAAAGCCACC
CAGCACTCAGCAGCAGAAACAAAGATGGGCCCGAGGCTCTTCCATATGGCCGAGGGCTTACCACCCTATCACAG
TGCCCTTGTCTAGACCCAGTCTGAGCAGGGGAGAGGCTCTTGAAGACTGTAGTCCCTTACCACCAATGTGTTCTC
CACTGCCCTGTCTGCTTGTGCTACAGAGGGGCAAGGCTCCCGGACCCCACTTAGGAATGCTTGTGCTCTG
CGAGGACAGGACGCTGTACCAAGCTGTGGGACAGGGGGCTGGAAGGCACAGGCTCTAGGAGGACCCGATATGTC
CCGCTGCAGCTGTAAACATCGGCTGGGCCCTGCAAGGCCCACTCAAGCCCTGGGTTAGTGTGTCAGGCTGG
GTGGGTGGGGCTGACCCAGCTTCCAGGGGACTGTCACTGTGGACGCCAAATGGCATAACTGAGATAAGGTGA

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FIGURE 1238B

ATAAGTGACAAATAAAGCCAGTTTTTTACAAGGTAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1239

MAIKFLEVIKPFCVILPEIQKPERKIQFKEKVLWTAITLFIPLVCCQIPLFGIMSSDSADPFYWMRVILASNRGT
LMELGISPIVTSGLIMQLLAGAKIEVGDTPKDRALFNGAQLFGMIITIGQSIVYVMTGMYGDPSEMGAGICLL
ITIQLFVAGLIVLLLLDELLQKGYGLGSGISLFIATNICETIVWKAFSPTTVNTGRGMEFEGAIALFHLLATRTD
KVRALREAFYRQNLPLNLMNIATIFVFAVVIYFQGFRVDLPKISARYRGQYNTYPIKLFYTSNIPILQSAHSVSN
LYVISQMLSARFSGNLLVSLLGTSWSDTSSGGPARAYPVGGLCYLSPPEFSGSVLEDPVHAVVYIVFMLGSCAFF
SKTWIEVSGSSAKDVAKLKEQQMVMRGHRETSMVHELNRYIPTAAAFGGLCIGALSVLADFLGAIGSGTGILLA
VTIIYQYFEIFVKEQSEVGSMGALLF

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FIGURE 1240

ATGAAGATTGAGGAGGTGAAGAGCACTACGAAGACGACGCGCATCGCCTCCCACAGCCACGTGAAGGGCTGGG
CTGGACGAGAGCGGCTTGGCCAAGCAGGCGGCCTCAGGGCTTGTGGCCAGGAGAACGCGCAGAGGGTGTGGCCA
GTGGACCAGGGAGTTGGGGGCTGCAAGCAGGGCTGCTGCGGCGAGAGAGCTGCTGAAGTCGGGCTGCAGGTGCT
CCAGGTCAGCGGGGCACTTGGCCGCTGCAGAGACGAGATACGCGGGGTAACAGCCGTTCCGGAGCCGGTCAT
CAGGCGCCAAGCCCCTGGGCTCCTGCGAGCCGCGGGACCTTCTCCGCCCTTCCCAGGGCTGAGTTTCTGAA
CGGGAAGCTGCCGGCCCGCGGGGAGCCGGGAGCAGCCAGGGCGTGAGGACGTGGGTTCCGCTACCCCCGGCTT
GGAACAGCAGCGCGCAACAACCGCTGGCGTTTCATCGAGCCTCTCAGCAGCCCTGCGAGGCGCATCCCGGGAGAA
TCCCACGCCACAGCCGAGGAACTGAGGCAGGCAGGGTGACACACAGCCAGTAGTGTGGCGGGCGGGCGCCAGGC
TGCCACCGCGCTGAGGACGGCCCTCTGCCAGCCGGGAGGCGTGEGGCAGGACAGCCGCGCTCTGCCAGGGCC
CAGAGCCCCACTTTGCCAAGGAGCTGTGCTGGAGCGGTGACTTTGTTTCAGGGCCGAGAACCAGGAGGAGGGCC
AGACTTGCTGCTGGGCAGCTGGCACATGGGACATGGGGTGTTATGACTCCAGCATTTATGGAGCGCCTGCTGTGT
GCTCTGCAGGTGAGCAATGTGAGGCTCAGAGAAGAGAAACAGAAAGCCCGAGGCTTGTAGTGGGTCAGACACCCA
TCAGGAGCTTGCGATGAGTATGACAGCTCCTTGACGCAAAAGTCCAGGGGGCATGAGTGTGGGGCCATTGCAAGG
ACCAAGGCCCAAGCCTAG

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FIGURE 1241

MVDRLRPVKFPLLGMQPEAQQQPGPAGAPGQRATLAAAETEIRGVTARSGAGHQAPSPAGLLAAAGFFSALPEAE
FPEREAAGPRGSREQPGREDVGSRHPRLGTAAPQOPLAFIEPLSSPARRSRGESHATAEETEAGRVTHSPVVAGG
RPGCHRAEDRPLCQPGGVQDSRALARAQSPFTLPRSCRWSGDFVQGREPEEEARLAAGQLAHGTWGVMTPAFMER
LLCALQVSNVRLREEKQKARLEWVRHPSGAWHEYDSSLTQSPGGMSAGAIAGTRTQA

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FIGURE 1424

AGGTTAAAGGGGAGAAGATGAGGAAAGAGAACAATTTGGAAGTACGTGAAACCAAAATTAAGGGTAAAAGTGGGAGAT
TCTTCACAGTCAAGCTCCAGTTGCTCTTGATCCTGGGGCCAAAGATTTTCAGTCATTGTGGAAACAGCTTACACCC
ATGTGCTTCATCCATATCCAACCCAGATCACCAGTCAGAGAAACAGTTTGTGGTGTITGAGGGGAACCAATTATT
TCTACTCTCCCTATCCAACGAAGACAAACCATGCGTGTGAAGCTTGCCCTCTCGAAATGTGGAGAGCTACACCA
AGCTGGGGAACCCACGCGCTCTGAGGACCTACTGGATTATGGGCTTTCAGAGATGTGCTGCCATAGTCAGG
ATACTTTTAAAGTACATTATGAGAAACAACAGCCCTTTCTGACCATCACCAGCATGACCCGAGTCATTGAAGTCT
CTCACTGGGGTAATATTGCTGTGGAAGAAAATGTGGACTTAAAGCACACAGGAGCTGTGCTTAAGGGGCCCTTCT
CACGCTATGATTACCAGAGACAGCCAGATAGTGAATATCCTCCATCCGTTCTTTTAAAGACCATCCTTCTGCTG
CTGCCAGGATGTTTATTACCGGATGAGATTGGCAATGTTTCTACCAGCCACCTCCTTATTTTGGATGACTCTG
TAGAGATGGAATCCGGCTCGCTTCCCTCTCTTTGGCGGGTGAAGACCCATTACATCGTTGGCTACAACCTCC
CAAGCTATGAGTACCTCTATAATTTGGGTGACCAGTATGCACTGAAGATGAGGTTTGTGGACCATGTGTTGATG
AACAAGTGATAGATTCTCTGACTGTGAAGATCATCCTGCTGAAGGAGCCAAAGAACATTGAAATGTATAGTCCCT
ATGAAATCAGCCGTGCCCCAGATGAGCTGCATACACCTATCTGGATACATTTGGCCGCCCTGTGATTGTTGCCCT
ACAAGAAAAATCTGGTAGAACAGCACATTGAGGACATTGTGTCACATACAGTTTCAACAAGGTGCTCATGCTGC
AGGAGCCCTGCTGGTGGTGGCGGCCCTTCTACATCCGTGTTCTTCACCGTTATCATCTATGTTGGCTGGACTTCT
CCATCACCAGGATCCAGCCGAGAAGCCAGGATGAAGGTAGCCTGCATCAGAGCAGGCTTGTACCTTGGTCA
ACAAGAGAATAGGCCTTTACCGTCACTTTGACGAGACCGTCAATAGGTACAAGCAATCCCGGACATCTCCACCC
TCAACAGTGGCAAGAAGAGCCTGGAGACTGAACACAAAGCCCTTGACAGTGAAGTGCATGTGCGATCCAGGC
TGAAGACAGAGGGCTCTGATCTGTGCACAGAGTGAAGGAAATGCAGAAGCTGGATGCACAGGTCAAGGAGCTGG
TGCTGAAGTCGGCGGTGGAGGCTGAGCGCTGTGGCTGGCAAGCTCAAGAAAGACAGTACATTGAGAATGAGA
AGCTCATCTCAGGAAGCGCCAGGAGCTGGTCACCAAGATCGACCACATCTGGATGCCCTGTAGCCCCTGCCCG
CATCTCCAGGGGGCCAGGGTGCTGCATTTGCTGTGGCAGGCAGATTGGTGGTGTGTTGGGAGTGTGTCATG
GAGGCCAGTGAAGAGTGACATCTGTAAGGCCCTTCAAGGAAGAGAAACAGGCCCTGCGTCAGGCAGTGTGAGT
TTGCGCTTTGCTTAACTTTCTTTTTTTTTTTTTTTTTTAAAAAAGAAAACTTTAAAAAACTCCCATTAATAACA
AAACATCTTTGTGTTTTGAACAAAGGAATTTCAATATTGATTGGTATTCTGTTCTGAAGTCTAGGATATTTTT
CAGCCTATAAGCCCCCTGTTTATGCCCTCTAATTCTGATGTTTGGGTATTGTGTGAGTGCATGTGTTTTTTT
TTTTTTTTTTTTTAAAGCTGTGTGAACAAATGGAAATAAAGCAGGACTGTG

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FIGURE 1243

CTGCTCTTCCC GGTCATGAGGCGCCAGCCGCGGCTTGTTTCTGCTCCTGTTGCTTGGGACTTGGGCCCCGGCG
CCGGGCAGCGCTCTCCGAGGCACCGCGCTGATCAATGAGGACGTGAAGCGCACAGTGGACCTAAGCAGCCAC
CTGGCTAAGGTGACGGCCGAGCTGGTCTTGGCGACCTGGCGCGGCTCCACGTCGCCAGCTACCTCTTTCTCTG
CTGGCTTTGGAGCCTGAGCTCGAGGCCCGGCTGGCGCACCTGGCGCTGCAGGTAAGGGAGAAAGATGAGGAAGAG
AACAATTTGGAAGTACGTGAACCAAAATTAAGGGTAAAGTGGGAGATTCTTACAGTCAAGCTCCCAGTTGCT
CTTGATCCTGGGGCCAAAGATTTTCAGTCATTGTGGAACAGTCTACACCCATGTGCTTCATCCGTATCCAACCCAG
ATCACCCAGTCAGAGAAACAGTTTGTGGTGTGAGGGGAACCAATTATTTCTACTCTCCCTATCCAACGAAGACA
CAAACCATGCGTGTGAAGCTTGCCCTCTCGAAATGAGGAGGCTACACCAAGCTGGGGAACCCACGCGCTCTGAG
GACCTACTGGATTATGGGCCTTTACAGATGTGCCTGCCTATAGTCAGGATACTTTTAAAGTACATTATGAGAAC
AACAGCCCTTTCTTGACCATCACCCAGCATGACCCGAGTCATTGAAGTCTCTCACTGGGGTAATATTGCTGTGGAA
GAAAATGTGGACTTAAAGCACACAGGAGCTGTGCTTAAGGGGCCCTTCTCACGCTATGATTACCAGAGACAGCCA
GATAGTGAATATCTCCATCGGTTCTTTAAGACCATCTTCTGCTGCTGCCAGGATGTTTATTACCGGGAT
GAGATTGGCAATGTTTCTACCAGCCACCTCCTTATTTTGGATGACTCTGTAGAGATGGAAAATCCGGCCCTCGCTTC
CCTCTCTTTGGCGGGTGAAGACCCATTACATCGTTGGCTACAACCTCCCAAGCTATGAGTACCTCTATAAATTTG
GGTGACCAGTATGCACGTAAGATGAGGTTTGTGGACCATGTGTTTGATGAACAAGGATAGATTCTCTGACTGTG
AAGATCATCTCGCTGAAGGAGCCAAGAACATTGAAATTGATAGTCCCTATGAATACAGCCGTGCCCGAGATGAG
CTGCACTACACCTATCTGGACACATTTGGGCCCCCTGTGATTGTTGCCTACAAGAAAAATCTGTTAGAACAGCAC
ATTCAGGACATTGTGGTCCACTACAGGTTCAACAAGGTGCTCATGCTGCAGGAGCCCTGCTGGTGGTGGCGGCC
TTCTACATCCTGTTCTTACCCTTATCATCTATGTTCCGGCTGGACTTCTCCATCACCAGGATCCAGCCCGAGAA
GCCAGGATGAAGGTAGCCTGCATCACAGAGCAGGCTCTGACCCCTGGTCAACAAGAGAAATAGGCCCTTACCCTCAC
TTTGACGAGACCGTCAATAGTACAGTCAAGCAATCCGGGACATCTCACCCCTCAACAGTGGCAAGAAGACCTGGAG
ACTGAACAACAAGGCCTTGACCACTGAGATTGCACTGCTGCAGTCCAGGCTGAAGACAGAGGGCTCTGATCTGTGC
GACAGAGTGAGCGAAATGCAGAAGCTGGATGCACAGGTCAAGGAGCTGGTGCTGAAGTCGGCGGTGGAGGCTGAG
CGCTGTGGTGGCTGGCAAGCTCAAGAAAGACACGTACATTGAGAATGAGAAGCTCATCTCAGGAAAGCGCCAGGAG
CTGGTCACCAAGATCGACCAATCTCGGATGCCCTGTAGCCCTGCCCGCATCTCCAGGGGGCCAGGGTGCCT
GCACCTTGCTGTGGCAGGCAGATTGGGTGGTAGTGGGAGGTTGTGCATGGAGGCCAGTGAAGCTGACATCTGTA
AAAGGCCCTTCAAGGAAGAGAAACAGGCCCTGCGTCAGGCAGTGTGAGTTTGGCGTTTGCTCTTAACCTTTCTTTT
TTTTTTTTTTAAAAAAGAAAACCTTAAAAAAATCCCCATTA AAAACAAAACATCTTTGTGTTTGAACAAAGG
AAATTTCAATATTTGATTGGTATTCTGTGCTGAAGTCTAAGATATTTTCAGCCTATAAAGCCCCCTGTTTTATG
CCCTCTCAATCTGATGTTTGGGTATGTGTGAGTGCATGTGTTTTTTTTTTTTTTTAAAGCGTGTGTGAACA
ATGTGAATAAAGCAGGAGCTGTG

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FIGURE 1244

GTGAGCGCCAGGAAGTAGCGAGGCCAGCGTCGCCCGGGACTCGCTGCTCAAGTCTGTCTATTGCCTGCCGCCA
CATCCATCCTAGCAGGGCCCGCTCGCCACCAGGCGGACAAAAGCGGTCCGCTGAACACCATGCGGCCGCTCGGC
GTGCCGCCAGGCTCTGCTGTGTAGCGCCGCCACCCCGCCAGGTCCCGGAGGCCCGCTGCCGCGCACTCTG
CCCTGCTCCCAGCTCTACTCCAGGCCCGCTCGGCCGGGGCGCCGCCACCGCGCTCTGCTGGGGCGTGTGCCG
TCTGCACCCAGACCTTGAGCCCGCGCCCGGCCATGAGGTTGGCGCCCGAGCAGCGCGCTGGATGGCGCACCC
GGCCGTGCTGAATGCGCAGCACCCCGACTCACACCACCCGGGCTTGCGCGACAACATACATGGAAACCCGCGAGCT
GCTGCTCCAGACGAGGTGGACGTCTTCTCAATCACCTCGACTCGCAGGGCAACCCCTACTATGCCAAACCCCGC
TCACGCGCGGGCGCGCTCTCTACAGCCCCCGCGCAGCCCGCTGACGCGAGCGAGATGTGCCCGCCACACTTG
TTGCACAGCCCGGTTTGCCCTGGCTGGACGGGGCAAAGCAGCCCTCTCTGCCGCTGCGGCCACCCACCAAC
CCCTGGACCGTAGACCCCTTCTCAAGACGCCACTGCACCCCTCAGCTGCTGGAGGCCCTGGAGGGCCACTCTCT
GTGTACCCAGGGGCTGGGGTGGGAGCGGGGAGGCAGCGGAGCTCAGTGGCTTCCCTACCCCTACAGCAGCC
CACTCTGGCTCCACCTTTTTCGGCTTCCACCCACGCCACCAAGAAGTGTCTCTGACCTAGCACACCGGGG
GCTGCGTCTCCAGCTCATCTTCCGCGGGGGTAGTGCAGCCCGAGGAGAGGACAAGGACGGGCTCAAGTACCA
GTGTCACTGACGGAGAGCATGAAGATGGAAAGTGGCAGTCCCTGCGCCAGGCCCTAGCTACTATGGGACCCAG
CCTGTCTACACACCCCACTCCCACTACCCCTCTATGTGCCGGCGGCTGCCACGACTACAGCAGCGGACTC
TTCCACCCGGAGGCTTCTTGGGGGACCGGCTCCAGCTTCAACCCTAAGCAGCGCAGCAAGGCTGCTTCTGT
TCAGAAGCGGGGAGTGTGTCAACTGTGGGCCACAGCCACCCCTCTCTGGCGGGGAGCGGACCGGCCACTAC
CTGTGCAATGCTGTGGCTCTACCAAGATGAATGGGCAGAACCGACCATCATCAAGCCCAAGCGAAGACTG
TCGGCCGCCAGAAGAGCCGGCACTGTTGTGCAATTGTACAGCACAACCACCACTTATGGCGCCGAACGCC
AAGGGGACCTGTCTGCAACGCTGTGGCTCTACTACAAGCTGCACAATGTTAAAGGCCACTGACCATGAAG
AAGGAAGGGATCCAGACTCGAACCCGGAAGATGTCCAACAAGTCCAAGAAGCAGAAGAAGGGGCGAGTGTCTC
GAGGAGCTGTCAAAGTGCATGCAGGAGAAGTCACTCCCTCTCAGTGAGCTGCCCTGGCTGGACACATGGACCT
GTGGGCCACCTCCCGCCCTTCAGCCACTCCGGACACATCTCTGCCACTCCGACGCCCATCCACCCCTCCTCCAGC
CTCTCTTCGGCCACCCCAACCGTCCAGCATGGTGACCGCCATGGGCTAGGGAACAGATGGACGTGAGGACCG
GGCACTCCCGGATGGGTGGACCAACCTTAGCAGCCAGCATTTCCGAAGGCCGACACCACTCCTGCCAGCC
CGGCTCGGCCAGCACCCCTCTCTTGGAGGGCGCCAGCAGCTGCCAGAGTTACTGTGAATGTTCCCAACCG
CTGAGAGGCTGCTCCGCACTGACCGCTGCCAGGTGGGTTTCTGCAATGGACAGTGTGTTGGAGAACAACAA
GGACAACCTTATGTAGAAAGAGGGGAGCGGACAGACGAAGGCAACCATTTTAGAAGGAAAAGGATTAGG
CAAAAATAATTTATTTGCTCTGTTTCTAACAAGGACTTGGAGACTTGGTGGCTGAGCTGTCCCAAGTCTCTC
GGTTCTCTCGGGATGGCGGGTCCACTTGCCAGGGCTCTGGGGGAGATTTGTGGGACCTCAGCCTGCACCC
TCTTCTCTCTGGCTTCCCTCTCTGAAATAGCCGAACCTCAGGCTGGGCTGAGCCAAAGCGAGTGGCCACGGC
CCAGGAGGGCTGAGCTGCTGCTGCTTTGACGGGCCAGGCCCTGGAGGGCAGAGCAATCACGGGCGGTCTGCA
CAGATTCCAGCGCAGGGCTGGGTACAGGAAGGAAACAACTTTCTTGAAGGGGAAACGCTCTCCAGATCGC
TCCCTTGGCTTGGCGCGAAGCTGCTGTGACTGTGTCCCTTACTGAGCGGACGAGCTGTCTTGTGACG
TGGACCTGTAATAATACCTTTTTCTGTTAACCTTCAACCCCTCGCTACTACTCTGAGAC

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FIGURE 1245

GTCAAAGTGCATGCAGGAGAAGTCATCCCCCTTCAGTGCAGCTGCCCTGGCTGGACACATGGCACCTGTGGGCCA
CCTCCCGCCCTTCAGCCACTCCGGACACATCCTGCCCACTCCGACGCCCATCCACCCCTCCTCCAGCCTCTCCTT
CGGCCACCCCACCCGTCCAGCATGGTGACGCCATGGGCTAGGGAACAGATGGACGTCGAGGACCGGGCACTCC
CGGGATGGGTGGACCAAACCTTAGCAGCCAGCATTTCGGAAGGCCGACACCACTCCTGCCAGCCCGGCTCGA
CCCAGGGAGAGGCTGTGTCCTGCTGGGGTCTCAGGTCAGCTTTACTGTGGCTGTCTGGATCCTTCCCAAGGTA
CAGCTGTATATAAACGTGTCCCGAGCTTAGATTCTGTATGCGGTGACGGCGGGGTGTGGTGGCCTGTAGGGGGCC
CCTGGCCAGGAGGAGGATTGTCTGATGTAGTGACCAAGTGCAATATGGGCGGGCAGTCGCTGCAGGGAGCACC
ACGGCCAGAAGTAACCTATTTTGTACTAGTGTCCGCATAAGAAAAAGAAATCGGCAGTAT

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FIGURE 1246

GGCACGAGGATAAAGCCTGAGCGCGCGGCAGCGCGGAGTTGGCGGCTTGGAGAGCTCGGAGAGATTCCCTGGAA
CCAGAACCTTGGACCTTCTCGCTTCTGTCTCCGTTTAGTCTCCTCCTCGGCGGGAGCCCTCGCGACGCGCCCGGC
CCGGAGCCCCAGCGCAGCGCGCGCTTTGAAGGATGACCTCTAGGAAAGAAAGTGTTCGTGAAGGTTATCATCCT
GGGAGATTCTGGAGTCGGGAAGACATCACTCATGAACCAGTATGTGAATAAGAAATTACAGCAATCAGTACAAAGC
CACAAATAGGAGCTGACTTTCTGACCAAGGAGGTGATGGTGGATGACAGGCTAGTCACAATGCAGATATGGGACAC
AGCAGGACAGGAACGGTTCCAGTCTCTCGGTGTGGCCTTCTACAGAGGTGCAGACTGCTGCGTTCTGGTATTGA
TGTGACTGCCCCCAACACATTCAAACCCCTAGATAGCTGGAGAGATGAGTTCTCATCCAGGCCAGTCCCCGAGA
TCCTGAAAACCTTCCATTGTGTGTGGGAAACAAGATTGACCTCGAAAACAGACAAGTGGCCACAAAGCGGGC
ACAGGCTGGTGCTACAGCAAAAACAACATTCCTACTTTGAGACCAGTGCCAAAGGAGGCCATCAACCTGGAGCA
GGCGTTCACAGCATTGACCGGAATGCACCTTAAGCAGGAAACGGAGGTGGAGCTGTACAACGAATTTCTGAACC
TATCAAACCTGGACAAGAATGACCGGGCCAAAGGCTCGGCAGAAAGCTGCAGTTGCTGAGGGGGCAGTGAGAGTTG
AGCACAGAGTCCTTCACAAACCRAGAACACACGTAGGCCTTCAACACAATTCCTCTCTTCCAAACAAAAC
ATACATTGATCTCTCACATCCAGCTGCCAAAAGAAAACCCATCAAAACACAGTTACACCCACATATCTCGCACA
CACACACACACGACACACACACACAGATCTGACGTAATCAAACCTCCAGCCCTTGCCCGTGATGGCTCCTT
GGGGTCTGCTGCCACCCACATGAGCCCGCGAGTATGGCAGCAGGACAAGCCAGCGGTGGAAGTCATCTGATA
TGGAGTTGGCATTGGAAGCTATTCTTTTGTCTACTGGAGAGAGAGAACTGTTTACAGTTAATCTGTGTCTA
ATTATCTGATTTTTTTTATTGGTCTTGTGGTCTTTTACCCCCCCCTTCCCTCCCTCCTTGAAGGCTACCCCTT
GGGAAGGCTGGTGCCCATGCCCATACAGGCTCACACCCAGTCTGATCAGGCTGAGTTTTGTATGTATCTATC
TGTTAATGCTTGTTACTTTTAACTAATCAGATCTTTTACAGTATCCATTTATTATGTAATGCTTCTTAGAAAAG
AATCTTATAGTACATGTTAATATATGCAACCAATTAATATGATAAAATTAGTGTAACAAAAA

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FIGURE 1247

MSFSSRPVPEILKTSLLCWETRLTSKTDKWPQSGHRPGATAKTTFTLRPVPRRPSTWSRRSRLHGMHLSRK
RWSCITNFLNLSNWTMTGPRPRQKAAVAEGAVRVEHRVLHKPRTHVGLQHNSPLLFTQKKHLISHIQLPKENP
KHSYTPHISHTHTHTHTHRSVDIKLQPLPVMAPWGLPAHPHEPASMAAGQASGGSHSDMELALEAYSFCSLER
ERTVYS

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FIGURE 1248

AGAACTCTTCAGTTTCTGTGAGCGTCCGCTTCGTCTGGGCACTTCCGGTACTCCCATTTCAGTTCGGTCCCTGTCT
TTTACGTTTCCGGCAAACATCAGTGTCTGTGGGTAGTTGGAATCTTCAGTTCCCTGTGAGCGTTCGGCGCTCTTCTG
GGCCTGTGGAGTTTCTTGGACAGGGCCCGCGGGCTCCAGGACGGCGCCCTTAGCGACACCATCGCCCGAAATGC
AGAAAAGGCCATGACGGCCTTAGCAAGATTTTCGCCAGGCTCAGCTGGAAGAGGGGAAAAGTGAAGGAACGAAGACC
CTTTCTGGCCTCAGAATGTACTGAACTGCCTAAAGCTGAGAAGTGGAGACGACAGATCATTGGAGAGATCTCTAA
AAAAGTGGCTCAGATTCAGAATGCTGGTTTAGGTGAATTCGAATTCGTGACCTGAATGATGAAATTAACAAGCT
GCTAAGGGAGAAAAGGACACTGGGAGGTCGGATAAAGGAGCTGGGAGGTCCTGATTATGGAAGAGTTGGCCCTAA
AATGCTGGATCATGAAGGAAAAGAGTCCCAGGAAACCGAGGTTACAAGTACTTTGGAGCAGCAAAAGATTTCGC
TGGTGTAGAGAGCTGTTTGAAAAAGAACCCTTTCCTCCTCCAGAAAGACACGTGCTGAGCTCATGAAGGCAAT
CGATTTTGAGTACTATGGTTACCTAGATGAAGATGATGGTGTTATTGTGCCCTTTGGAACAGGAATATGAAAAGAA
ACTCAGAGCCGAGTTAGTGAAAAAGTGGAAGCAGAGAGAGAGGCTCGGCTGGCAAGAGGAGAAAAGGAAGAGGA
GGAGGAAGAGGAGGAAGAGATCAACATCTATGCAGTCACCGAGGAGGAGTCCGACGAGGAAGGCRGCCAGGAGAA
AGGAGGGGACGACGCCAGCAGAAGTTCATTGCTCACGTCCTGTTCCCTCGCAGCAAGAGATTGAGGAGGCACT
GGTGCGAAGGAAGAAAATGGAACCTCCTCCAGAAGTATGCAAGCGAGACCCCTGCAGGCCAAAAGTGAAGAAGCCAG
AAGGCTCCTGGGGTATAGGACCCAGCTGGGGCTCTCCTTGGAGTTCCTCCATCCCCCAGTGGTACCTCAGGACC
CAGGGCTGCAGACACAGGCTGGTGTGCAAGGGCTCCTGCCCATCTCAGCCTTCCTCCCTCCTCTGTCTCA
TGTTCACCGAGGGTAGGGGTCTGTCCCTGGTCTCCTGGTAGGTTTTGTACACATATTTTGCTACTGTGTGGAT
CCATTTATTTTTATTGTGGAGTGTATACAAAGGTTGCGAACTGGCTGCCTGTGCTTATTTTGACTTGCAGTGC
CATTTTGAGGGGAGAGAATCAATTAGTGGCAACATTTAAAAATGCAATTTTTTGACAGCAAAAGTATAATTTT
AAAAAATGCAAAATTTCTAAAAAGACATCTCTTGAAAAATGAGATGATGTGGCCAGGCGCAGTGGCTCACGCCCT
GTAACCCAGCACTTTGGGAGGCCGAGGCGGGGTCACGAGGTCAAAGAGATGGAGACCATCTCTGGCCAACATG
GTGAACCCCATGTCTACTAAAAATACAAAAAATTAGCTGGCGGTACTGGCATGCACCTGTAGTCCCAGCTGCT
TGGGAGGCTGAGCGAGGAGAATCACTTGAACCCGAGAGGTGGAGGTTGAAGTGAGCCAAGATCGTGCCATTGCA
TCCAGCTTGCGACAGAGTGAGACTCTGTGCCACAAAAAAGAAAAA

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FIGURE 1249

MARNAEKAMTALARFRQAQLEEGKVKERRPFLASECTELPKAEKWRRQIIGEISKVQIQNAGLGEFRIRDLND
EINKLLREKGHWEVRIKELGGPDYGVGPKMLDHEGKEVPGNRYKYFGAAKDLPGVRELFEKEPLPPPRKTRAE
LMKAIDFEYYGYLDEDDGVIVPLEQEYKKLRAELVEKWKAEAREARLARGEKEEEEEEEINIYAVTEESDEE
GSQEGGDDSQQKFIAHVVPVSQQEIEEALVRRKMEMLQKYASETLQAQSEEARRLGY

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FIGURE 1250

GAATTCCTCAACAGCCTCTACCTTGCAGAGCCGTCTTCCCGAGGCCTGCGTCCGAGTCTCCGCCGTGCGGGCCCGC
TCCGACGCGGAAGATCTGACTGCAGCCATGAGCAGCAATGAGTGCCTTCAAGTGTGGACGATCTGCCACTTGGGCC
CGGGAATGTCTACTACTGGTGGAGCCGTGGTCTGTGAATGAGAAGCCGTGGCAGAGGTGGTTTTTACCTCGGATAGA
GGTTTCCAGTTTGTCTTCTCGTCTCTTCCAGATATTTGTTATCGCTGTGGTGTGAGTCTGGTCATCTGCCAAGGAT
TGTGATCTTCAGGAGGATGCCTGTCTATAACTGCGGTAGAGGTGGCCACATTGCCAAGGACTGCAAGGAGCCCAAG
AGAGAGCGAGAGCAATGCTGTCTACAACTGTGGCAAAACCAGGCCATCTGGCTCGTGACTGCGACCATGCAGATGAG
CAGAAATGCTATTCTTGTGGAGAATTCGGACACATTCAAAAAGACTGCACCAAAGTGAAGTGCTATAGGTGTGGT
GAAACTGGTCATGTAGCCATCAACTGCAGCAAGACAAGTGAAGTCAACTGTTACCGCTGTGGCGAGTCAGGGGCAC
CTTGCACGGGAATGCACAATTGAGGCTACAGCCTAAATATTTTCTTTTGTGCGCCCTCCTTTTTCTGATTGATGG
TTGTATTATTTTCTCTGAATCCTCTTCACTGGCCAAAGGTTGGCAGATAGAGGCACTCCCAGGCCAGTGAGCCTT
TACTTGCCGTGTAAAAGGAGGAAAGGGGTGAAAAAAACCAGCTTCTGCAATTTAACTACAAAAAAGTTTATGT
TTAGTTTGGTAGAGGTGTATGTATAATGCTTTGTAAAGAACCCCTTTCCTGTGCCACTGGTGAATAGSGATTG
ATGAATGGGAAGAGTTGAGTCAGACCAGTAAGCCCGTCTGGGTTCTTGAACATGTTCCCATGTAGGAGGTAAA
ACCAATTCTGGAAGTGCTATGAACCTCCATAAACTTAAATTTAGTATAATGATGGTCTTGGATTGTCTGA
CCTCAGTAGCTATTAAATAACATCAAGTAACATCTGTATCAGGCCCTACATAGAACATACAGTTGATGGGAGTA
AACAAAAAGATAAACATGCGTGTATAATGGCTGTTGAGAGAAATCGGAATAAAAGCCTAAACAGGAACAACTTCA
TCACAGTGTGATGTTGGACACATAGATGGTGATGGCAAAGGTTTAGAACACATTATTTTCAAAGACTAAATCTA
AAACCCAGAGTAAACATCAATGCTCAGAGTTAGCATAATTTGGAGCTATTGAGGAATTGCAGAGAAATGCATTTT
CACAGAAATCAAGATGTTATTTTGTATACTATATCACTTAGACAAGTGTGTTTCATTTGCTGTAATCAGTTTTT
AAAAGTCAGATGGAAGAGCAACTGAAGTCTAGAAAAATAGAAATGTAATTTTAAACTATTCCAATAAAGCTGGA

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FIGURE 1251

MSSNECFKCGRSGHWARECPTGGGRGRGMRSRGRGGFTSDRGFQFVSSSLPDICYRCGESGHLAKDCDLQEDACY
NCGRGGHIAKDCKEPREREQCCYNCGKPGHLARDCDHADEQKCYSCGEFGHIQKDCTKVVCYRCGETGHVAINC
SKTSEVNCYRCGESGHLARECTIATA

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FIGURE 1252

CATGGCTGCCCTCAGATCCCTTGTTGAAGCCCAAGATCGTCAAAAAGAGAACCAAGAAATTCATCCGGCACCAGTC
AGACCGATATGTCAAAATCAAGATGAGAAGAATAATGTCTGGGGTGAAGGTGAAGCACCAGCCCAAGACTCAGC
AGCCAGGAAGTGGCCAGCGCTCTTTATACCACGGGTGAGGAATTCACACAGAAAAGTGGAGGCCAAGGCGTGA
GAATTCCTCAATGACTGCCCTCTAAAGGAAGAGGACCAGGCTTCCTGTGAGAGACTGAGGACCAGGAAGAAACA
TGTCTCGGCCCTGTCCCTCCACAAATTCAGAGGCCACATTCTAACAGGGGAGGCTGACCAATTAACAGATAA
TGACACCTCCTAGAGCTAAGAGCTCTCCGACTATGAACCAGATGCCCTGGAGAACCGGATGAATGGTCTGAGCAT
GAGCAGGGGTGGGAGGCAGCGTTAAGGAGGCATCAGAGTCAGAACCTAGCAAACAAGTGTTTGTGAAGAAGAAAT
TCATAGAAAAGGGCAATGCGGGCATCACATGGGCTAAGGAACAGAGGGGTAGCAGTAGCTGTGTGCCAAGCTGC
AGGTGTTATACACTACCTCTAGATCTGGGTTTCCTTAAACACCTTGAGAGGACAACCTTGCAAAGCACGGCAC
AGTGCCGAGAGGGAAGGAGCATTGAGGCTCTCAGTCCCTCGCTCTGAGCCTACTTCTCTGCTTCTGGGCTCCAG
CCATCTTTGTGAAAAGGGGGCTGCTAGTGACACCTCTCAAGGGTCTTCCAGCTCTAGGTCGGCTGTGCTGGAG
TCTAGGATTTGCCCACTGAGAAATCTGTTTCCAAGTTCCTTCAACCTGATGCATCCTGCAGCATCACGGCAGCTG
TTCAGAGTGGTCAGAAGGCCCTGAATGAGCTCAGTAGAGGGAAGCCTGGGAACAGGGAGGCACCTGCAGCTCTA
CTCATGGCCTGGCCAGAGCTCAGCAGCTCTTCTCTGCCATCTAGTGGGATGGCATACCATCACTGGGGACCACC
CTGTGCAAACTGGTGAGCCTGAGTGCTGTACAGAGGGAAGAAAGGGGGGGATACAGGATTTAGATGAAAATA
GCAACTCCTACCCATTGTGCAAAATCATCCAGCTTTTCAAAACATCATATTTGTAAGTATTTTTTGTGTTTTT
ACAGAGTCTTGCTGTGTACCAAGGCTGGAATGCAGTGGGATGATCTCGGCTCAGTGTAGCCTCTGTCTCCCTGG
TTCAAGCAATTTCTGCCAGCCTCCCAAGTAGCTGGGACTACAGGCATGCGCCACCACACCCAGCTAAGTTTTGT
ATTTTTTTAGTAGAGTCAGGGTTTTACTTTGGCCAGGCTGGTCTTAAACTCCTGGCCTCAACTGATCTGCGCTGTC
TCGGCCTCCCAAAGAACTGGGATTACAGGCATGAGGCACCGTGCCTGTCCCATGTGTGTAATTAATGATAATTAC
CATATACAATTTTTTTAATTTAAATAAATCAATGAACAGTGTATTTTTT

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FIGURE 1253

MHPAASRQLFRVVRRLNELSRGKPGNREAPAALLMAWPELSSSSLPSSGDGIPSLGTTLCKLVSLSACHRGKER
GGIQDLDEIATPTLLSKSSSFFKTSYCTDFFVFLTESCCVTKAGMQWHDLGSL

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FIGURE 1254

GGTGGCGTGGGGACTCCCTGAAAGCAGAGCGGCAGGGCGCCCGGAAGTCGTGAGTCGAGTCTTCCCGGGCTAATC
CATGCCGGGTTGGAGGCTGCTGACGCAGGTCGGCGCCCAAGTGCTGGGTCGACTCGGGGACGGCCCTGGGTGCTGC
CCTGGGCGCGGGGAACAGAACACACATCTGGCTTTTGTAGAGGTCTTCATGAAAGAGTGGTACATGGTGGGA
TGAGCATCTTTCTGAAGAAAATGTCCTTCATTAAAGCAGTTGGTCTCTGATGAAGATAAAGCCCAATTAGCAAG
TAAACTGTGTCCTCTGAAAGATGAACCATGGCCATACATCCTTGGGAACCAAGGTTCCCTTAGAGTTGGTCTTAT
TGCCCTGAAGCTGGGCATGATGCCTTTATGGACCAAGGATGGTCAAAGCATGTGGTCACATTACTTCAGGTACA
AGACTGTCATGCTCTAAAATATACGTCAAAGGAAAACGTGAATGGAAAATGGCAACCCCTGCTGTAGGAGGAAA
AACTGTATCACGTTTTCTGTAAGCTACATCCATATTGGAATTTTACCGGGAACCTGGATTGCCGCCGAAACAGAC
AGTTAAAACTTTAATATAACAGATAATGCTGCAATTAACCAAGGCACCTCCTCTTTATGCTGCTCACTTTCGTCC
TCGACAGTATGTGGATGTCAAGCCAAATCGTAGTGGTAAAGGTTTTCAAGGTGTCATGAAAAGATGGGGATTTA
AAGGCCAGCCTGCTACGATGGTCAAACGAAAACCCACAGGAGACCTGGAGCTGTGCAACTGGTGATATTGGCA
GAGTCTGGCCTGGAATAAAATGCCTGGAAAAATGGGAAACATATACAGGACAGAATATGGACTGAAAGTGTGGA
GAATAAACACAAAGCACACATAATCTATGTAATGGCTCTGTACCTGGACATAAAATTTAGTAAAGGTCA
AAGATTCTAAACTGCCTGCATATAAGGATCTCGGTAAAAATCTACCATTCCCTACATATTTTCTGATGGAGATG
AAGAGGAACCTGCCAGAAGATTTGTATGATGAAAACGTGTGTGAGCCGGTGGCCTTCTATTACATTTGCCATAAC
ATCTTTGGACGTGGCAGAACCTTACATATTCTGTGAGCTTCGATGAGCCAGAGTGATATCATAACCAACAGAAAT
CATACTCTCCTTTCTTAGTACAAACAAAATCACACATGTCATCTTTGTCAAGGCGATAAATATATCATTCATACC
CCCATTAAATTTTGTAGAAAAATTACCACATTAATATATAGTTAAGTAGATTGGATTGTGTAAGTTGGGT
TGGGCATATTAGCAAAATATTCTAATTTGTGGAATCGATTCTTTTACTACATATTTCCCAAGTTATCTTAAG
ATGCTGTAAATTTAACTTTTATAAGTTTGTCAATCTTTGTGAATAGTGGTTGTGGAACAGTAGAAAACCAT
ATGGGGACTATAGTGCAACCTATTGGGTAAGAAACCATTTGCTAAAATGGAGAAAGTAATAAGATTTTATTT
AAATTACAGAAACATGTTAAAGCGCGACAAAGGAAAGACAATAAAATCATAAATTATC

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FIGURE 1255

ATGATGACAGTAGGAGTTGAGTGGAGGAGATGGCAAGTTGAGCGAGGAGGTGGCAGTGGGGCCCCAGATCAGGT
GCCTCCAATGGCAGGC1CTGAAGAGCTGGGGCTCCGGGAAGACACGCTGAGGGTCCTAGCTGCC1TCCTTAGGCGT
GGTGAGGCTGCTGGGTCTCCTGTTCCAAATCCACCTAGAAGCCATGCCAAGAAGCCAAACAGACTTCCTGAGC
CGCCTTCGAAGATGTCTTCCCTGCTCCCTGGGGCGAGGAGCAGCCCCCTCTGAGTCCCTCGGCCTTGGTCTCTG
CCCATCCGCCCCCTGCTATGGAGCCCCCTGGCCCTGGCCATGGAGCTGAGCCGGCGCGTGGCCGAGCTGGGGGACAC
CCGGGCCGGA1TCAGCGTAGAGCACGCGCACAGCCTCACGCCCTGGATCCAGGCCACGGGGGCCGGCTCCACTG
CGTTCGTTCTGTGGTGA1CCTTGCTGTATGCCCCGACTGCAGCCATGAGTGTGACGCTATGCCTGGCGTCAAT
GACTGGGTACGCTAA

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FIGURE 1256A

GAGGTGACACCGGTTGCTTTCCCGGGAGTTCGGCGTTTGCTGGGGCTGCAGCAGCTGAAGTGTAGTGTTCCTTG
GGACTGGCGGGTCTGCACTTCTCTCCCGGGTTCATCTCCCCCGCCCGGTGGTGAGGCGCTTCAGAGAGGGGCTCGG
ACGGGTGTAGCGATTCCGCGCTAGAGGAAGACGAGGCCCGGGAACGCATGTCCCCAGGGCAGGTAGGGGGCTGG
AGGGGTCAAATCCCGGGGTACTTGTGGAGACTCTTAGCGTGGCTTCTCTCTCTGCTGAGACCCCGAGAGCTTT
CCGAGTTCTCTCTCCAGGACACCGGGGTTCCTGAAGATCGGGACTTTTCTGCGCCCTCCACCAACAGCCCATC
TCTCTGTATAGCAAGAACCTTCGTAGAAACAACCTTCCCGCTGCTGACGCGTTCCTCCCGCTCCGCTCCCGGAA
GTAGTCTACTATGACCTCGTTGTGAGCCTCTGAACGATTTTGACACTTTCCGAGGCCCTAGGGTATTTATCTCTA
ACCTTACTAAAGACCAAGAGCTCTTGCATTTAGGGAATACAGTTGCTGGCAATGCTCCCTCCAGATCCCT
TGTGTAGAGAGTTATTTTTCAGATATTCATGACTTTGAATATGATAAAAGCCTGGGGAGTACTCGGTTTTTTAAA
GTTGCTCGAGCCAAGCAGGAGAGGCGTGGTCTGTGTGAAGTTTTTGCAATTCAGGATCCACATATGCCTTTA
ACCAGCTATAAACAGAGCTGGAGGAACGAAAACTCAGGCTTAATCTGCACAGAAATGTCTACCTTTCCAGAAA
GCATCAGAAAAAGCATCTGAGAAAGCAGCTATGCTCTTAGGCAGTATGTGCGAGACAATCTCTATGATCGCATC
AGTACCCGCTCCATCTTGAATAACATTTGAGAAGCGCTGGATTGCTTTCCAGATCTTCAGAGCTGTGGACCAAGCA
CACAAATCTGGAGTTCTGCTATGGGGACATCAAGACTGAGAATGTGATGGTCACCAAGTTGGAATTTGGGTTCTCTA
ACTGATTTTGGCAGTTTTAAGCCCACTATCTTCAGAAAGCAACCCGCGAGTTTCAATTAATTTCTTTGACACA
TCACGGAGGAGCAACTGCTATATGCTCCTGAACGTTTTGTTGATGGTGGGATGTTTGCCACTCAGTTAGAAAT
ATGAGAGATCCTTCAACTCCGCTTGTAGACTTAATAGCAATCAGAGAACAGAGGAGAGTTGAAGAGAGCAATG
GACATCTTTTCAGCAGGTTGTGTGATAGCTGAGCTTTTTACAGAAGGTGTACCAATTAATTTGATCTCTCTCAACT
TTGGCTTATAGAAATGGACATTTTTCCCTGAACAAGTGCTATAAATAAATTTGAAGATCAGAGTATCAGAGAAATG
GTAACCTCAGATGATTCACCGTGAGCCAGATAAACGTTTAGAGGCAGAAAGTTACTTAAACAGCAGCGGTGGCAAT
GCCCTTCTGCAAAATATTTCACCTTTTCTTACGCCCTACATGCCCCAGTTTGCACGAAGAACTGTTCTTCTGCA
GATGAGCGTATCTGCTTATACGGAAGGATTTGGGCAACATTATTCACAACTCTCTGTGGACATGATCTGCCAGAA
AAAGCCGAAGGAGAGCCTAAGGAAAAATGGGCTGGTTATCTTGGTATCTGTTATAACATCTGCTACAGACCCCT
AAATACTGTGATTTCCAACTAGCTGCTTTGGAAGTATCTCTCATTTGGCTCCAAGATTAAGTGTGAAATCCCT
TTGGATCGTATTACTCCATATCTTTGCAATTCAGCAATGACTCTGTTCTCAGGTTGAGGCGTGAGCCCTTGAGG
ACGTTGACCAAAAGTTCTTGCTCTCGTCAAGAGGTTCCCTGTAATGATATCAATTAATTTACCCGGAACATACCTCTG
CCAGGCATAGCCCACTTAGCCCAAGATGATGCTACTATCGTTAGACTAGCCTATGCTGAAAACATAGCTCTGCTG
CGAGAAACAGCTCTGAGATCTTGGAAATTAGTACAGTTAAAAAATCTTAATATGGAATAAGTACCCCAATATGAA
GAAATAGATGAGGTTACACATCCAAATGGAAATTAGACACAGAGCTCCAAGCCTTACATGAAATGGTCCAGCAG
AAAGTTGTACTTTGCTAAGTACCCCTGAAAAATTTGTAACAAACCTTTGATGGAATAAGGAATAACACGGCTG
TGTGTATTCTTTGGACGTCAGAAAGCCACAGATGTTTTGTTGTCCCACTGATTACTTTCTTAAATGATGAAGAT
GATTGGCACTCTACGTTGGAGCATTTTTTGATGATAGTTGGTGTGCTGCCATTTGCTTGGCAAGAGTCCCTCA
ATTCTCAAGCCTCTGCTGCAACAGGCTCTTAGTGATGCTGAGGAATTTGTCAATGTGAAGAGCTCTTATGCGCTT
ACTTGATGTGCGCACTAGACTGCTACAAAAACCCGATTTTACGAATTTGCAAGTATGTCGCCCTTCTGCTG
TGTCAATCCCAATTTATGATACGTTATGCTGCGCTGGGATTTATCAGAGTGGTAGCTCGTCAAATAGTACAGCT
GATGCTACTGTAACCTGATGCCCTATCTTGACCCATATATACCACCAATAATACAGATTGAAAGAAAACTT
GTTCTGCTCAGTGTTTTAAAGGAACAGTAAGTCTGCTTATATTTGATATGCTTTGAGGCTTAAAGATATTACT
AGCTTGTTCAGACATCTTCACATGCGCTCAGAGAAACGAAATGGTCTCTCTCCGCACTGCCCTCCGCGCAGGAT
CTCGCATAGCAGCTCTGCAAGAGTTGCTCTCAGAGGAATGACAGGAAGAGGAGAGCAAACTCTCTGGCA
CTGAAAGACTTCATGATGAAATCTAAATAAGCAAAGGCCAATATAGTGACCAGAGCCATCTTCATGATAGTAGT
CAGAAAGGTGTAATGACTTGGCAGCTTTAGGCATAACTGGGAGACAAGTTGATCTTGTTAAAAACCAACAAAGAA
CCAGATGACAAACCGGCCAGAAACATGTAAACCAAGACTCAAATGTAATGAGGAATGGAAGAACATGTTTTGGG
TCACTGGACCCACCAAACTGACCAAGGCCCTACCTAAAGGGAGTGATCAGGAGGTGATTTCAGACTGGGAAACCT
CTCGCTTCCGAGTCTCTGCTGCGATTTTGTGTCCTTTGTCACTCTCAGAGTTGCAAGGCTGTTAGTTGCCCATCTT
CAAATAAAAAACCAAGTAATACCGGTTTTTAAGTAGTACAATCTTACCATCCACCTATCAGATTGCAATTAACA
TGTAAAACTGAACTTCAGCAACTCATCCAGCAAAAGCGGGAGCAGTGCAATGCTGAGAGAAATAGCTAAGCAGATG
ATGGAAAACTGTAATGGGAGATGTAACCAACCACTCCAGTGGCTGCTTAAAGGGCTGTAGTTGCCCATCTT
CATGAGCATAAATCTGCTGTGAATCGAATTAGAGTCTCTGATGAACACTCACTTTTGCACATGTTCAAATGAT

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FIGURE 1256B

GGCACAGTAAAAATCTGGAACAGTCAAAAGATGGAGGGGAAGACCACCACTACCAGATCTATTCTTACATACAGC
CGAATTGGAGGACGAGTCAAGACGCTCACATTCTGCCAAGGCTCCCACTATTTAGCCATAGCATCTGATAATGGT
GCTGTCCAGCTTCTTGGAATTGAGGCTTCTAAGCTGCCAAGTCTCCTAAAAATCCATCCTCTACAAAGCAGAATT
CTAGATCAGAAGGAGGACGGTTGTGTTGTGGATATGCATCACTTCAACTCTGGAGCACAGTCTGTCTTGCCCTAT
GCCACTGTGAATGGCTCTCTGGTTGGCTGGGACCTTAGGTCTTCAAGCAATGCGTGGACTTTAAAGCATGATTTA
AAGTCGGGCTCATCACTTCCTTTGCTGTGGACATCCACCAATGCTGGCTCTGCATTGGTACAAAGCAGTGGTACC
ATGGCTTGTGGGACATGAGGTTCCAGTTGCCAAATTTCAAGTCACTGTATCCTTCCAGGGCTCGAATCAGACGC
CTCTCAATGCACCTCTGTATCAGTCTCTGGGTGATTGCAGCTGTTACGGGCAACAACGAAGTGCCATGTGGGAC
ATGGAGACTGGTGACAGAAGATTTACTCTCTGGGCCAGCAGTGCACCACCACTTTCTGAATTACAGCCTTCTCCT
CATAGCGTCCATGGTATCTACTGTAGTCTCTGCAGATGGAATCCTATCCTACTAACAGCTGGCTCAGATATGAAA
ATAAGGTTTTGGGACTTGGCTTACCCAGAAAGTCTATGTTGTTGAGGAAGTACTAGTTCCTCCATCTGTGTCC
TACTACAGGAAAAATAATTGAAGGCACCTGAAGTTGTCCAGGAAATTCAGAATAAGCAGAAAGTAGGACCAAGTGAT
GACACCCCTCGAAGGGGCCAGAGTCCCTGCCCGTGGGACATCATGACATCATCACTGATGTCCGCCACATTCCAG
ACCACACAGGGCTTCATCGTAACTGCTTCTAGAGATGGGATTGTGAAGGTGTGGAAATTAACCTACTGATTGT
ATAAATTTTAAATAGTTATAAATATAATACTATAACTCGAGAAAAGGCATTCTAGAGAACAGATTCAATTGCTTA
ATTTTCAAAATTAATGCTCCATATTACTGTTTCATGACTGACTGACTAAATGACACCCAAAATGGTTAAGATGTA
CTTGACTAGTTTACTTATGCATCTCTTTGCAAGAAATCAGCCAGCCAACAATGTCTGGGATTTTATTGTATATGT
TATAGAGGTGAGAAATGTAATAATATGAAAATGAATATGTTTATTTGTATTGAAAAAGATGGTTGAAAAGATGTT
TGAAGCTATTATAGTATAAACACATTTTGTCTATTAAAAATGCTATTCAAAGCAGTTAAACTGT

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FIGURE 1257

MGNQLAGIAPSQILSVESYFSDIHDFEYDKSLGSTRFFKVARAKHREGLVVVVFVFAIQDPTLPLTSYKQEELEELK
IRLNSAQNCPLFPQKASEKASEKAAMLFROQVVRDNLVDRISTRPFLNNIEKRWIAFQILTAVDQAHKSGVHRGDIK
TENVMVTSWNWVLLTDFASFKPTYLPEDNPADFNYFFDTSRRRTCYIAPERFVDGGMFATELEYMRDPSTPLVDL
NSNQRTRGELKRAMDIFSAGCVIAELFTEGVPLFDLSQLLAYRNGHFFPEQVLNKKIEDHSIRELVTQMIHREPK
RLEAEDYLKQQRGNAPFEIFYTFLQPYMAQFAKETFLSADERILVIRKDLGNIIHNLCGHDLPEKAEGEPKENG
VILVSVITSCLOTLKYCDSKLALELILHLAPRLSVEILLDRI TPYLLHFSNDSVPRVRAEALRTLTKVLALVKE.
VPRNDINIYPEYILPGIAHLAQDDATIVRLAYAENIALLAETALRFELEVLQKNLNMENDPNNEEIDEVTHPNGN
YDTELQALHEMVQKQVVTLLSDPENIVKQTLMEGTITRLCVFFGRQKANDVLLSHMITFLNDKNDWHLRGAFD
IVGVAAVVGWQSSSILKPLLQOGLSDAEFVIVKALYALTCMCQLGLLQKPHVYEFASDIAPFLCHPNLWIRYGA
VGFITVVARQISTADVYCKLMPYLDPIITQPIIQIERKLVLSVLKEPVSRISFDYALRSKIDITSLFRHLHMRQK
KRNGSLPDCPPPEDPAIAQLLKKLLSQGMTETEEEDKLLALKDFMMKSNKAKANIVDQSHLHDSSQKGVIDLALG
ITGRQVDLVKTKQEPDDKRARKHVQDSNVNEEWKSMFGSLDPPNMPQALPKGSDQEV IQTGKPPRESSAGICV
PLSTSSQVPEVTTVQNKFPVIVLSSTILPSTYQIRITCTCKTELQQLIQKREQCNAERIAKQMMENAEWESKPP
PPGWRPKGLLVLAHLHEHKSAVNRIRVSDHSLFATCSNDGTVKIWNQKMEGKTTTTRSILTYSRIGGRVKILTF
CQGSHYLAIASDNGAVQLLGIEASKLPKSPKIHPLQSRILDQKEDGCVVMDHFNHFGAQSGLAYATVNGSLVGD
LRSSNANTLKHDLKSGLITSAVDIHQCWLICIGTSSGTMACWDMRFQLPISSHCHPSRARIRRLSMHPLQSWV
IAAVQGNNEVSMWMDMETGDRRTLWASSAPPLSELQSPSPHVSHGITYCSPADGNPILLTAGSDMKIRFWDLAYPER
SYVVGSTSSPSVSYRRIIEGTEVVQEIQNKKQKVGPSDDTPRRGPESLPVGHDDITDVATFQTTQGFIVTASR
DGIVKWK

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FIGURE 1258A

GGCCCTGCCTTCTCCATCAGACACCTGGGAATCAGAGCTGGGGCCCTGCTTTGGCCGTTTGCTCTGCTGGAATC
TGATGAGGAAAGACGCTCTGATAGAGAGTAATTAGACGCAGACAGAGATCTCTCTCATAGTCAGAGGAGCCCTAGC
AGGGGCTGAAGGAATCGCTTGAGGATGACAAAGAAGGGGATCCATGAACAAGGAGGATGTTGAACAGGTTTCTTGCT
GATCTTGGCACTGACCGAAGCGCTGGCATTGGCCATCCAGGAACCATCTCCAGGGAATCTCTCAGGTCCTTCCC
TTCAGGCATCTCCCCGGGAACCATGGTGACAGCACCCACAGCTCTACACAGACATACTTCTGTGGTGATGCTGAC
CCCCAATCCCGATGGAGCCCCCTCAGAGGCTGCAGCTCCCATGGCAACACCGCACACCCCGTGCAGAGGGGCACCC
TCTACGCACACCATCTCCACCATCGCTGCGACAGTAACGCCCCCATTTCTGAAAGCTCCCTGTCCACAGGGCC
CGCTCCAGCAGCCATGGCAACACATCTCTCAAGCCAGAGGGCCGCCCTCGAGGGCAGGCTGCCCCACCATCTCT
GCTGACAAAGCCACCGGGGGCCACAGCGCCGCCACACAGCGCCCCCGGCTACCCACAGCAGGCCCCCAG
GCCCCAGGCTCTTCCGAAAGGGGCTGGTAATTCATACGCCCTGTCCCGCTGCAGCTGGTGGCCACTCCAG
GAGTAAGAAGGACAGCGAGGACGAAATCCAAGCTCCACACCTCTGGGGCAGAAGCGGCCCTGGGGAATCTT
TCAGATCTACAAGGGCAACTTCACAGGGTCTGTGGAACCGGAGCCCTCTACCTCTACCCCCAGGACCCACTCTG
GGGCTACTCTCTTACCACAGCCCCAGACAGTGGCTGCACACAGTGCCAGCAATACCTCATGGGACCCAC
CACCACTCCCTGGGGCTGCAAAAGGACAAAGCCAGGCTTCGACAGACGCCAGGGGGGTGGTTCTACCTTCAC
CAGCCAAAGGAGGACACAGATGACCCAGAGCCTCAGGTGCCCTGTCACTGCAAGCTGCCCAAGCTTCCCTGCTC
TCAGCGCCCCACACGGTGACCCAGGATGGCCCCAGCCATAGTGACTCTTGGCTTACTGTACCTCGGCAC
CAGCAGACCTCTGCTACCAAGCTCTGGGGTCTTCCAGGCTGCCACGGGGCCACCCAGCTGCCTTCGATACAG
TGCTCTCAGCCCTTCCAGGGGATTCTCAGGGAGCATCCACAACCCACAAAGCTCCAAACCCATCTCCCTCAGGGT
CTCAGAAAGCACTATTCTGAGAGCCAAAGGAGGAGCTGTGGCCACCTCACCATGACGCCAGCCGGGTGCCGATCC
TCTCTCCACAGTGATATCCAGCAGCAGGCAATTTCTCAACCGCTGGTCCCGCCGGGACCTGGAAGCTCTGG
GACAGCAGGGAATCTCCCTGTGGCCAGGGGGGACAAACCGCAGCACAGCCACCATCTGCCAGCAAGAT
GGATATCGCCTGGGTGATCTGGCCATCAGCTGCCCCATCTCTCTGCTCTGTCTGCTGACGGTGCTGCTGAT
GAAGAGGAAGAAGAACGCCCAACCCGGGAACAACCTGAGCTACTGGAACAACACCATCACCATGGACTACTT
CAACAGGCTACTGCTGGAGCTGCCAGGGAGATCCAGTCCCTGAAACCTCTGAGGACAGCTCTCAGAGCCCCG
CTCCCCAGCCAAATGGCGACTATAGAGACACTGGGATGGTCCTGTGTAACCCCTCTGTGCAAGAAACACTGTTTGT
GGGAACGATCAAGTATCTGAGATCTAATACAGCAGGCATCACTTGGCCATTCCGTATTTTCTGCTCTAAT
ATAAATATACAAATACATATCTGTAAATATAACCTTGTGTAACCCCTGACTTAATGAGAAACATTTTCAGCTTT
TTTTCTATGATGATGTCAACATCTTTTTACAAGTGTGGTTTAAAAAATAAATCTTACAGATGATCTGTG
GCTTTATAAATAAAGGTATTTCTAAGCAAAAGCAGTTGCATGATTGCTCTCTCTATAACTATTCTTGAGCACC
TGGGGATCCAGGAACCTTGGTCAGGTGAGGTAAGAGACTGACCTCTGTAGAAGCTGAATGTTACAGTGCAAGC
GCACGATTCTTTAGTGATTCTTAAAGCTCTGGTTCCTCTGTATTGGTGTGACCCCATTTCCCTCTCTATA
CGCACCTGTAAAGGGAATCGGCCCTCAGGGGAAGACGGCAGACTATGCACAGAGAGGAAAGGGAACA
TCTCATCCTCTGAGGATGAGTACCCTGGAGCCTTATGACGGCACCATTGGATGTCTGTTTAAATTCATCCAA
GTTGTGATGGCAGGACGAGCTGAGGCCCTCAGGAATCCATGGAGGACATCAAGGACATCCCAAGGCATATCT
CCCTAACATTACTTCCACTGCTAACACAGGACTGCCTTTCCCTGGTGGGAAATGCTCCCTTATGCCCCATTCC
TGATTCCTCCCTCAACACCCACATCTGCATTAAACACCCGTCCTTTCTCTGGAGAGGGTTAGATGCAGATCCC
GGCCCTGGAGCTTTAAATGATTTGCCCTTCTCTCTCAAGGATCAAAATGTTTATTTGGGGTACGCTTTGTTTCT
CAAAAGGCCATGTGATCTGCGCCCTCAGGAACATGTTTATCTAAGAAGCTTTGAGGTAGTAGAGGCAATATTTT
GAAACCTTCTCTGCAATCTTAAAAAAGAAAAAAGATTCGCCAAACAATCATTTGAGAGACATCATTT
ATACTCTACTTGGCATGCAAACTGCTCGCAGCACCAGCCGGTGGACTTGCATCCAGCTCTCAGCTTCCACT
GCTCCCTTGTTCGGGGCCGGCTGGCTGCCCTCCCGCTGTGTGTCAGCAGCGCCAAACAGCTCAGACCTCAGA
GACGCCCAAGGGGCTTCAGAGGTGGCCGCTTCTCTATTTTTTCTGATTGTGGCTGAGAGAGATGATTACTGCT
TTGACACTCTCTTCTCTAAAGGAAAAATAGTTTGTATAGTATAGATGCTCTATAGTCAGATTG
GGAATTGAATCTGAATATTTGGGTACATGTTTGTGTTGCTGTAGTCTGATGACTTTTTCTCTGCTGCT
TTCCTTAAAAAATAAAGATGGCCCTTCAAAAGTGTGTTCTCAATGTTGTATGAACCTCTTACATGAGTTC
GGTGTGTGCTCTCTCAAAAGACTTCAACCCCAAGAAGCAACTAAATGTTCTCTCAAGTTTAAATTTCTGAG
CGTGTGTTGTCTTACCTTTTTAACTTACCATAATATTTCTTAAGCTGTACATTTAATATCAACAAAGTGTG
AAGTATACAGAGAAAACTGTTTGTAAAGTAAATTTATATATAATATATGTAATCAAAGATACATATGTATATA

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FIGURE 1258B

TATACATATGTGGATGTATGACTTATTTTTCCTTATCCACAGATTTCAGCTACCATGTATATATAAATAAACTTA
TTTATTAGCCAGAG

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FIGURE 1259

MKRSIQALYCQLLSFLLILALTEALAFAIQEPSPRESLQVLP SGTPPGTMVTAPHSSSTRHTSVVMLTPNPDGPPS
QAAAPMATPTPRAEGHPPTHITSTIAATVTAPHSESSLSTGPAPAAMATTSSKPEGRPRGQAAPTILLTKPPGAT
SRPTTAPPRITTRRRPPRPPGSSRKGAGNSSRPVPPAPGGHSRSKEGQGRNPSSITPLGQKRPLGKIFQIYKGNFT
GSVEPEPSTLTPRPLWGYSSSPQPQIVAATTVP SNTSWAPITTS LGPAKDKPGLRRAAQGGSTFTSQGGTPDA
TAASGAPVSPQAAPVP SQRPHHGD PQDGPSHSDSWLTVIPGISRPLSTSSGVFTAATGPTPAAFDTSVSAPSQGI
PQGASTTPQAPTHPSRVSESTISGAKEETVATLMTDRVPSPLSTVVSTATGNFLNRLVPAGIWKPGTAGNISHV
AEGDKPQHRATICLSKMDIAWVILAI SVPISSCSVLLTVCCMKRKKKTANPENNLSYWNNTITMDYFNRAVELP
REIQSLETSEDQLSEPRSPANGDYRDTGMVLVNPFQETLFGVNDQVSEI

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FIGURE 1260

ATGGCGGCGGCATTACGGGTGGCGGGTCGGGGCAAGGCTCAGCGTTCTGGCGAGCGGTCTCCGCGCCGCGGTCCGAGCCTTTGACGCCAGGCCACCTCTGTTAACGAACGCATCGAAACAAGCGCCGGACCCGCTGCTGGGAGGGGGCCAAACGCCGATTTGACGCGCAGCAAGCGAGGAAAGCTAACAGCCAGGAGAGGATCAGTCTCTTGCTGGACCTGGCAGCTTTGTTGAGAGCGACATGTTTGIGGAACACAGATGTGCAGATTTTGAATGGCTGCTGACAAGAATAAGTTTCTGGAGACAGCGTGGTCACTGGACGAGGCCGAATCAATGGAAGATTGGTTTATGTCTCAGTCAGGATTTTACAGTTTTTGGAGGCAGTCTGTGAGGACACATGCCCAAAAGATCTGCAAAATCATGGACCAGGCCATAACGGTGGGGGCTCCAGTGATTGGGCTGAATGACTCTGGGGGAGCAGGATCCAGAAGGAGTGGAGTCTTTGGCTGGCTATGCGAGACATCTTCTGAGGAATGTTACGGCATCCGGAGTCAATCCCTCAGATTTCTCTGATCATGGGCCCATGTGCTGGTGGGGCCGTCTACTCCCCAGCCCTAACAGACTTCACGTTTCATGGTAAAGGACACCTCCTACCTGTTTCATCACTGGCCCTGATGTTGTGAAGCTGTGCACCAATGAGGATGTTACCCAGGAGGAGCTCGGTGGTGCCAAAGACCCACACCACATGTGAGGTGTGGCCACAGAGCTTTGAAAATGATGTTGATGCTTGTGTAATCTCCGGGATTTCTTCACTACCTGCCCCGTGAGCAGTCAGGACCCGGCTTCGCTCCGTGAGTGCCACGATCCAGTGACCGTCTGGTTCTTGAGCTTGACACAATTTGTCCTTTTGAATCAACCAAAGCCTACAACATGGTGGACATCATACACTCTGTTGTTGATGAGCGTGAATTTTTTGAGATCATGCCAATTATGCCAAGAACATCATTTGTGTTTTGCAAGAATGAATGGGAGGACTGTTTGAATTTGTGGCAACCAACCTAAGGTGGCCTCAGGATGCTTGGATATTAATTCATCTGTGAAAGGGGCTCGTTTTGTGAGATTCTGTGATGCATTCAATATTCCAATCATCACTTTTGTTGATGTCCTTGGCTTTCTACCTGGCACAGCACAGGAATACGGGGGCATCATCCGGCATGGTGCCAAAGCTTCTCTACGCAATTGCTGAGGCAACTGTACCCAAAGTCACAGTCATCACCAGGAAGGCCTATGGAGGTGCCTATGATGTCTAGAGCTTAAGCACCTTTGTGGTGATACCAACTATGCCTGGCCCAACCGCAGAGATTGCAGTCATGGGAGCAAAGGGCGCTGTGGAGATCATCTTCAAAGGCGATGAGAATGTGGAAGCTGCTCAGGCAGAGTACATCGAGAAGTTTGCCAAACCTTTCCCTGCAGCAGTGCAGGGTTTTGTGGATGACATCATCCAACCTTTTCCACACGTGCCGAATCTGCTGTGACCTGGATGTCTTGGCCAGCAAGAAGGTACAACGTCCTTGGAGAAAACATGCAATATTCCATTG**TAA**

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FIGURE 1261

MAAALRVAAVGARLSVLASGLRAAVRSLCSQATSVNERIENKRRTALLGGGQRRIDAQHKRGKLTARERISLLLD
PGSFVESDMFVEHRCADFGMAADKNKFPGDSVVTGRGRINGRLVYVFSQDFTVFGGSLSGAHAQKICKIMDQAIT
VGAPVIGLNDSSGGARIQEGVESLAGYADIFLRNVTAGSVIPQISLIMGPCAGGAVYSPALTDFTFMVKDTSYLF
TGPdVVKSVTNEDVTQEELGGAkThTTMSGVAHRAFENDVDALCNLRDFFNYLPLSSQDPASVRECHDPSDR
ELDTIVPLESTKAYNMVDIIHSVVDEREFFEIFMPNYAKNIIVGFARMNGRTVGIVGNQPKVASGCLDINSV
KGA
RFVRFCDAFNIPLITTFVDVPGFLPGAQYGGIIRHGAKLLYAPAEATVPKVTVITRKAYGGAYDVMSSKHL
CGD
TNYAWPTAEIAVMGAKGAVEIIFKGHENVEAAQAEYIEKFANPFFAAVRGFVDDIIQPSSTRARICCDLDV
LASK
KVQRPWRKHANIPL

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FIGURE 1262

GAGGCTATGGCGCTCAACAAGAATCACTCGGAGGGCGCGGAGTGATCGTCAATAACACCGAGAGCATCCTAATG
TCCTATGATCAGCTGGAATCACATTCAATGACATGAAGAAGCTGCCAGAAGCCTTCAAAGGGACCAAGAAAGGC
ACTGTCTACCTTACCCCTTACCGGGTCATCTTTCTGTCCAAGGGCAAGGATGCCATGCAGTCTCTTCATGATGCCA
TTTTATCTCATGAAAGACTGTGAGATCAAGCAGCCGCTATTTGGTGCAAACTACATCAAGGGAACAGTGAAGGCG
GAAGCGGGAGGTGGCTGGGAAGGCTCTGCTTCCTACAAGTTGACTTTCACGGCAGGGGGCGCCATTGAGTTCCGA
CAGCGGATGCTCCAGGTGGCATCTCAAGCCTCCAGAGGTGAAGTCCCCAGTGGAGCCTATGGCTACTCTTACATG
CCACGCGGGGCTATGTCTATCCCCGCCAGTCGCCAATGGAATGTACCCCTGCCCTCCTGGCTACCCCTATCCA
CCGCCCCACCTGAGTTCTATCCAGGACCCCCATGATGGACGGGGCCATGGGATACGTGCAGCCCCACCAACCG
CCCTACCTTGGGCCATGGAACCTCCGGTCAGCGGCCCGATGTCCCTCCACTCCTGCAGCCGAAGCCAAGGCC
GCAGAAGCAGCGCGCAGCGCCTATTACAACCCAGGCAATCCTCACACGTCTACATGCCACGAGCCAGCGCGCG
CCACCTCCTACTACCACCGGAAGATAAGAAGACCCAGTAGGCCCTCCTGCTCCCTGCCCTCCACCCCTCATCT
CTCTACCTACCCCTCCCATCGGGGCTGTGCTGGGGCTTGGGGAGGGGAGGGGGCGCCTTGTCTCCCTCCAGGT
CTGATCATAAAACAATTACCAGGAAGTAGCATTGTGGGACATTAGGGCCCCGGGCTCGGGAGAGGTGCCGCCAG
CTTCCCATGCCAGCCCGAGCCCAAGTGTGCCCCAGGTACCTCCCTCACCCTCTGGGGCTCTTCTGGGAGCAC
GGAGCATCCCTGTTCCTGTTTCACTCTCAGCTTCTCCCTCGAAGGGACTCTCTGGCCACCTCCTCCACCGCAG
TCCAGCTCCCTCAGTCTGGCACCCACTGTCTACACTCAGCCTCATGAGCCACTTCAGACCAGCCAGGTGTCTTCCC
GGGCCCTGCCAGACCTGTCTCACATTCCCTCTGTCTGTCTGTCTGTCTCTCAGAAGGCCACCGCGCCGCAATTC
ACTCAGCCAGGGTCCAGCTGCAGCCCCCGCCACCCTTCTTCCCTTCCCTGTCTGGGTGATGTTGTTGCCACCC
TGTGTGACTTTTGAAGCTGTAAATGAGCTTCCAGGGCTTGGGTGGCGTCGGGGCAGGGCCGCGGAGGCTGGGAG
GAAGCCCTTCTGCCTTTTGTCTGTGTTTCTGGAATTTGCTTCCCTCACCTCTCACTTCTTCTAGAAGGAGCTT
CCTGACTGGAACCAAGAAATGCATGTCTCCACTTGGTGGTGCTGGGTGGGGCCGGGAACAAGGCCCTGAC
CCTGTGTGCTGGCCGGACCTGCCACAGCCCCCAGCCTGCTTCTTCCCCTTAAGCTTTGTGCCCCCTGGATGCG
CTAACATTCACTCTTGTGTTGTCCTGGACTGGCCATGAAGTGAGGAGATGGTTATTAAAGAGAATTCCCTATTT
ATTTGACAAAAATCCAGTTAAATATTAATGTGAATAAACCCCTGTTTGGCCCTCG

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FIGURE 1263

AGGCTCAGGATGAGATCCAGCACTGTCCGTGTCCCGGCCCCAGACCGGCTGTCTTCTGGGCCCTGAGCCTG
AGGACCTGGAGGACCTGTACAGCCGCTACAAGAAGCTGCAGCAAGAGCTGGAGTTCTTGGAGGTGCAGGAGGAAT
ACATCAAAAGATGAGCAAAAGAACCTGAAAAGGAATTTCTCCATGCCAGGAGGAGGTGAAGCGAATCCAAAGCA
TCCCGCTGGTCAICGGACAATTTCTGGAGGCTGTGGATCAGAATACAGCCATCGTGGGCTCTACCACAGGCTCCA
ACTATTATGTGCGCATCTCTGAGCACCATCGATCGGGAGCTGCTCAAGCCCAACGCTCAGTGGCCCTCCACAAGC
ACAGCAATGCACTGGTGACGTGCTGCCCCCGAAGCCGACAGCAGCATCATGATGCTCACCTCAGACCAGAAGC
CAGATGTGATGTACGCGGACATCGGAGGCATGGACATCCAGAAGCAGGAGGTGCGGGAGGCCGTGGAGCTCCCGC
TCACGCATTTGAGCTCTACAAGCAGATCGGCATCGATCCCCCGAGGCGTCTCATGTATGGCCACCTGGCT
GTGGGAAGACCATGTTGGCAAGGCGGTGGCACATCACACAACAGCTGCATTTCATCCGGGTCGTGGGCTCGGAGT
TTGTACAGAAGTATCTGGGTGAGGGCCCCCGCATGTTCCGGGATGTGTTCCGCCITGGCCAAAGGAGAAATGCACCTG
CCATCATCTTTCATAGACGAGATTGATGCCATCGCCACCAAGAGATTGATGCTCAGACAGGGCCGACAGGGAGG
TTCAGAGGATCCTGCTGGAGCTGCTGAATCAGATGGATGGATTGATCAGAATGTCAATGTCAAGGTAATCATGG
CCACAAACAGAGCAGACACCTGGATCCGGCCCTGTACGGCCAGGACGGCTGGACCGTAAATTTGAATTTCCAC
TTCCTGACCGCGCCAGAAAGAGATTGATTTTCTCCACTATCACTAGCAAGATGAACCTCTCTGAGGAGGTTGACT
TGGAAGACTATGTGGCCCGCCAGATTAAGATTTCAGGAGCTGATATTAACCTCATCTGTGAGGAGGTGGAATGT
TGGCTGTCCGTGAAAACCGCTACATTGTCCTGGCCAAGGACTTCGAGAAAGCATACAAGACTGTATCAAGAAGG
ACGAGCAGGAGCATGAGTTTACAAGTGACCTTCCCTTCCCTCCACCACCACTCAGGGGCTGGGGCTCTCT
CGCACCCCGACCTCTGTCCCAAAACCTCATTCCTTTTTCTTTTACCAGGATTGGTTTCTCAATAAATAG
ATAAGATCGAATCC

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FIGURE 1264

CTGGAAGAATTGCGGCCGAAGTGGCTGGCTCATTTAAGATGAGGCTTCTGCTGCTTCTCCTAGTGCGGCGCTCT
GCGATGGTCCGGAGCGAGGCTCGGCCAATCTGGCGGCGTGCCAGCAAGAGATTAAAGATGCAGTACGCCACG
GGGCCGCTGCTCAAGTTCAGATTGTGTTCTGAGGTTATAGSCGGGTGTTGAGGAGTACATCGGGTTATT
AGCCAGCGGTACCCAGACATCCGCATTGAAGGAGAGAATTACCTCCCTCAACCAATATATAGACACATAGCATCT
TTCTGTGAGTCTTCAAACCTAGTATTAAATAGGCTTAATAATIGTTGGCAAGGATCCTTTTGCTTCTTTGGCATG
CAAGCTCCTAGCATCTGGCAGTGGGGCCAAGAAAATAAGGTTTATGCATGTATGATGGTTTCTCTTTGAGCAAC
ATGATTGAGAACCAAGTGTATGTCAACAGGTGCATTTGAGATAACTTTAAATGATGTACCTGTGTGGTCTAAGCTG
GAATCTGGTCACCTTCCATCCATGCAACAACCTTGTTCAAATCTTGACAATGAAATGAAGCTCAATGTGCATATG
GATTCAATCCCACACCATCGATCATAGCACCACTATCAGCACTGAAAACTCTTTTGCATTAAAGGGATCATTGCA
AGAGCAGCGTGACTGACATTATGAAGGCTGTACTGAAGACAGCAAGCTGTTAGTACAGACCAAGATGCTTCTTG
GCAGGCTCGTTGTACCTCTTGGAAAACCTCAATGCAAGATAGTGTTCAGTGCTGGCATATTTTGAATTCCTGCA
CATTCATGGAGTGCAATAATACTGTATAGCTTTCCCACTCCCAAAAATCACCAGTTAAATGTGTGTGTGT
TTTTTTTTAAGGTAAACATTACTACTTGTAACTTTTTTCTTAGTCATATTTGAAAAAGTAGAAAATTGAGTTA
CAATTTGATTTTTTTTCCAAAGATGCTGTAAATCTGTTGCTTTTATATGAATAITTTGTTTTTATAGTTTA
AAATTTGATCCTTTGGGAATCCAGTTGAAGTTCCCAAATACTTTATAAGAGTTTATCAGACATCTCTAATTTGGCC
ATGTCAGTTTATACAGTTTACAAAATATAGCAGATGCAAGATTATGGGGGAAATCCTATATTACAGAGTACTCTA
TAAATTTTTGTGTATGTGTGTATGTGCGTGTGATTACAGAGAACTACTAAAAAACCACCTGCTTTTTAAATCC
TATTGTGTAGTTAAAGTGTATGCCTTGACCAATCTAATGAATTGATTATTAACCTGGGCTTTATACCTTAACCTA
AATAAAAACTAAGCAGATATGA

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FIGURE 1265

GCGGCCGAAGTGGCTGGCTCATTAAAGATGAGGCTTCTGCTGCTTCTCCTAGTGGCGCGTCTGCGATGGTCCGG
AGCGAGGCCTCGGCCAATCTGGGCGCGTGCCAGCAAGAGATTAGTGTTTCTGAGGTTATAGGCGGGTGTTCG
AGGAGTACATGCGGGTATTAGCCAGCGGTACCCAGACATCCGCATTGAAGGAGAGAATTACCTCCCTCAACCAA
TATATAGACACATAGCATCTTTCCTGTCAGTCTTCAAACCTAGTATTAAATAGGCTTAATAATTGTTGGCAAGGATC
CTTTTGCTTTCTTTGGCATGCAAGCTCCTAGCATCTGGCAGTGGGCGCAAGAAAATAAGGTTTATGCATGTATGA
TGGTTTTCTTCTTGAGCAACATGATTGAGAACCAGTGATGTCAACAGGTGCATTGAGATAACTTTAAATGATG
TACCTGTGTGGTCTAAGCTGGAATCTGGTCACCTTCCATCCATGCAACAACCTGTTCAAAATCTTGACAATGAAA
TGAAGCTCAATGTGCATATGGATTCAATCCACACCATCGATCATAGCACCACCTATCAGCACTGAAAACCTTTT
TGCATTAAAGGGATCATTGCAAGAGCAGCGTGACTGACATTATGAAGGCCTGTACTGAAGACAGCAAGCTGTTAGT
ACAGACCAGATG

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FIGURE 1266

GCGGCCGAAGTGGCTGGCTCATTTAAGATGAGGCTTCTGCTGCTTCTCCTAGTGGCGGCGTCTGCGATGGTCCGG
AGCGAGGCCCTCGGCCAATCTGGGCGGCGTGCCAGCAAGAGATTAAAGATGCAGTACGCCACGGGCGCGCTGCTC
AAGTTCAGATTTGTGTTTCTGAGGTTATAGGCGGGTGTGAGGAGTACATGCGGGTTATTAGCCAGCGGTAC
CCAGACATCCGCATTGAAGGAGAGAATTACCTCCCTCAACCAATATATAGACACATAGCATCTTTCCTGTCAGTC
TTCAAAGTAGTATTAATAGGCTTAATAATTGTTGGCAAGGATCCTTTTGCTTTCTTTGGCATGCAAGCTCCTAGC
ATCTGGCAGTGGGCGCAAGACCAAGTGTATGTCAACAGGTGCATTTGAGATAACTTTAAATGATGTACCTGTGTGG
TCTAAGCTGGAATCTGGTCACCTTCCATCCATGCAACAACCTTGTTCAAATCTTGACAATGAAATGAAGCTCAAT
GTGCATATGGATTCAATCCACACCATCGATCATAGCACCACCT

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FIGURE 1267

CAATTAAGTTGCAGAGTTCTGATGGAGAGATATTTGAAGTTGATGTGGAAATGCCAAACAATCTGTGACTATTA
AGACCATGTTGGAAGATTGGGAATGGATGATGAAGGAGATGATGACCCAGTTCCTCTACCAATGTGAATGCAG
CAATATATAAAAAAGGTCATTCAGTGGTGCACCCACCACAAGGATGACCTCCTCCTCTGAAGATGATGAGAACA
AAGAAAAGCGAACAGATGATATCCCTGTTTGGGACCAAGAATTCCTGAAAGTTGACCAAGGAACACTTTTGAAC
TCATTCTGGCTGCAAACTACTTAGACATCAAGGTTTGCTTGAATGTACATGCAAGACTGTTGCCAATATGATCA
AGGGGAAAACTCCTGAGGAGATTGCAAGACCTTCAATATCAAAAATGACTTCCCTCTTTTGTAAAGCAATG
TCTGCC TAGTTATTGTCCAGTTAACTTTAGTGACCTTTTAAAGTTGGCATTGTAATAAAAACAACCTTGCAAAA
AAGTTTCTGGAATAGAATTAACAAAATATTATCTTTATTATCATGAGTTGGAAACTGGAAAAAGGCTTCTTGAAGT
AAATGTTCTGAGTGGAGCTACTAGGATGTCTCCAGCCTCCTGCAGTCAAGGAGTACCCTGTATTGATTAGCCT
GTATGTAGCAGGGCTCCCTTCATTGCACTCTGAGGACTTGTTTCTTTTCTTTATTTTTAATCCTCTTAGTTTTA
AATATATTGCCTAGAGACTCAGTTACTACCCAGTTTGTGGTTTTTGGGAGAAATGTAACCTGGACAGTTAGCTTT
TCAATTA AAAAGACACTTAACCCATGTGGGATGTCATCTTTTATAATTAGTGTCCCATGTGGAGAAAAATTATT
CACACTACTTGCATGTAAAGAATAATTTAACTTTTAACTTAAATATGTGGTAAAACCCAGAAAGCATCCATCA
TGAATGCAAGATACTTTCAATAAAAAGTAAGTTATATAGTAGGTAGTTAAGTTTGCTTTTGTGGACTTAAATGTG
TCTCTTCACTTAAATGGGTTGAATGTGTATATATTGTTCAAGCTTGAAAAGACTTAGTTTATATCCTAGCTCACT
GGAGGCTGCTGACATAACCATAACTTCTGTCCCTCTAATTGTCAATTTATATGCTTAACCTGGAGCTAGTACTTTA
ATTCTTAACACAAAATTACCTGCCATTGTTCCAGCTTCCTCCTTACAATAGAATGAAGTTTTTTGTATGGCTT
GAGATGGCTCACAAATTTTGATTTTTTTTCTTCCTTGIGCTCCCTTTTTTCTCCTTGCTTTTCCAGTTAACAT
CTATATTCACTAGTAATCTTGTTTTCTCTTCACTTCACTGAGTTGTTCAAGCTCAGATCATCCCTTGACAGTAG
TTTGCTTTCATCTCACCTTTTCATTTGTCCCAATTACCTTATTTAATAAAGTCCCATATGTTGTCTCACTTAA

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FIGURE 1268

CAATTAAGTTGCAGAGTTCTGATGGAGAGATATTTGAAGTTGATGGAAATTGCCAAACAATCTGTGACTATTA
AGACCATGTTGGAAGATTTGGGAATGGATGATGAAGGAGATGATGACCCAGTTCCCTACCCAATGTGAATGCAG
CAATATTAAGGATTCATTGAGTGGTGCACCCACCAAGGATGACCTCCTCCTCCTGAAGATGATGAGAAC
AAGAAAAGCGAACAGATGATATCCCTGTTGGGACCAAGAATTCCTGAAAGTTGACCAAGGAACACTTTTGAAC
TCATTCTGGCTGCAAACTACTTAGACATCAAGGTTTGCTTGATGTTACATGCAAGACTGTTGCCAATATGATCA
AGGGGAAAACCTCTGAGGAGATTCGCAAGACCTTCAATATCAAAAATGACTTTACTGAAGAGGAGGAAGCCAGG
TACGCAAGAGAACCAAGTGGTGTGAAGAGAAAGTAAATGTTGTGCCTGACACTGTAACTGTAAAGGATTGTCC
AAATACTAGTTGCACCTGCTCTGTTTATAATTGTTAATATTAGACAAACAGTAGACAAATGCAGCAGCAAGTCAAT
TGTATTAGCAGAATATTGTCCTCATTGTCATGTGTAGTTTGAGCACAGATCCCAACCTTACGGCCCAAGTTTCTTC
TAGTATGATGGAAGTTTCTTTTCTTTGCTCTGAATAAACTGAACTGTGGGTTCTCTATAAGTGGCATTG
GGCTTTCCCTCTTTTGTAAAGCAATGCTGCCTAGTTTATTGTCCAGTTAACTTTAGTGACCTTTTAAAGTT
GGCATTGTAATAAAACAACCTTGCAAAAAGTTTTCTGGAATAGAATTAACAAAATATTATCTTTATTCATGAGT
TGGAACTGGAAGGCTCTTGAAGTAAATGTTCTGAGTGGAGCTACTAGGATGCTTCCAGCCTCCTGCAGT
CAAGGAGTACCCTGTATTGATTAGCCTGTATGTAGCAGGGCTCCCTTCATTGTCATCTGAGGACTTGTTTTCTTT
TTCTTTATTTTAACTCTCTTAGTTTTAAATATATTGCCAGAGACTCAGTTACTACCCAGTTTGTGGTTTTTGG
GGAGAAATGTAAGTGGACAGTTAGCTTTTCAATTAAAAAGACACTTAACCCATGCGGATGTCATCTTTTATAA
TTAGTGTCCCATGTGGAGAAAATTATTCACACTACTTGCATGTAAGAAATAATTAACTTTTAACATTAATAA
TGTGGTAAACCCAGAAAGCATCCATCATGAATGCAAGATACTTTCAATAAAAAGTAAGTTATAT

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FIGURE 1269

MPSIQLQSFGEIFAVDVEIAKQSVTIKTITLEDLGMDDEGDDPVPLPNVNAAVLKKVIQWCTHHKDDPPPFEDDE
NKEKQTDDIPVWDQEFLLKVAQGTLFELIRAANYLDIKGLLDVTCKTVANMIKGTPEEIRKTFNIKNDFTEEEEA
QVRKENQWCEEK

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FIGURE 1270

GGTGGGTTTATCTCAAGGCCTGAGTAGCCGGTAACAAACGAGGGTTCCCGGGATTGGACCCAGCGCACCATGCCTC
TGGCATTGATATCAAAAGAAAGCTAACTGCTAGATCTGATCGAGTTAAGAGTGTGGATCTGCATCTTACAGAGC
CATGGATTGGCAAGTCTTTACAATGGCAGTGTGTGTGTTTGGAAATCATGAAACACAGACACTGGTGAAGACAT
TTGAAGTATGTGATCTTCTGTTGCGAGCTGCAAGGTTTGTTCGAAGGAAGAAATGGGTGTGTGACAGGAGCGGATG
ACATGCGAGATTAGAGTGTTCAAATTACAATACTCTGGAGAGAGTTTCATATGTTTGAAGCACACTCAGACTACATTCT
GCTGTATTGCTGTTCATCCCAACCCAGCGCTTTCATTCTAACTAGCAGTGAATGACATGCTTATTAAGCTCTGGGACT
GGGATAAAAAATGGCTTGGCTCACAAGTGTGTAAGGACACACCCATTATGTTATGCGAGATTGTGATCAACCCCA
AAGATAACAATCAGTTTGGCAGTCCCTCTTTGGACAGGACTATCAAGGTGTGGCAGTTGGGCTCTTCGTACACAA
ACTTCATTGTGAAGGACATGAGAAAGGCGTGAATTGCATTGATTACTACAGTGGTGGGACCAAGCCATACCTCA
TTTCAGGTGCAGATGACCGTCTTGTAAAAATATGGGATTATCAGAATAAAAAATGTTGTCAGACACTGGAAGGAC
ATGCCCAAAATGTGCTCTTGTGCCAGCTTTCATCCTGAGTTGCCAATCATTATCAGAGTTCAGAAGATGGAACAG
TACGTAATTGGCATTCAAGCACCTACCGGCTTGAGAGCACACTGAATATGGAATGGAGAGGGTATGGTGCCTGG
CCAGCTTAAGAGGGTCAACAATGTGCGCTTTGGGCTATGATGAAGGGAGCATCATTGTTAAGCTTGGTCGGGAGG
AACCTGCCATTGCTCATGGATGCCAATGGAAGATAAATTTGGGCCAAGCATTGAGAAGTCCAGCAGGCCAACCTAA
AAGCAATGGGAGATGCTGAAATTAAGATGTTGAAAGATTGCCACTGGCAGTAAAGGATATGGGCAGTTGTGAAA
TATACCTCAGACTATTACGACAAATCCTAATGTGGCGGTTTGTGGTGGTGTGGTGTAGTGGGAGATATATCATCT
ACACAGCAATGGCATTGAGAAACAAGAGCTTTGGATCTGCTCAGGAGTTTGGATGGGCCACAGATTTCTCAGAT
ATGCAATAAGAGAGGACCAACAGCATGTAAGAATATTTAAGAACTTTAAGGAAAAAATAATCTTAAACCAAGATT
TTGGAGCAGAAAGTATCTACGGCGGCTTCTTATTGGGAGTCAGATCTGTAATGGCTTAGCCTTCTAGCTGGG
ACAATACAGAACTCATACGAAGAATGAAATTCAGCCCAACATATTTCTGGTCTGACTCTGGAGAGCTAGTCT
TATGTGCTACTGAGGAATCAATTTTATCCTTAAGTATCTGCAGAAAAAGTCTTGGCTGCACAGGAAACACATG
AGGGAGTTACTGAAGATGGCATTGAAGATGCCCTTGAGGTTCTTGGTGAGATTACGAAATTTGTAAGAACAGGGC
TTTGGGTAGGCGATTGCTTCATTACACAAGTTCTGTGAACAGATTAATTTATATGTTGGAGGAGAAATAGTCA
CCATTGCCCACTTGGACAGGACGATGTATCTCCTAGGCTACATTCCTAAAGACAAAGGCTTTATCTGGGGGATA
AAGAATTGAACATCATATAGCTATTCCTGCTGGTTTCAGTCTCGGAATACCAGACAGCTGTCAATGCGGAGGGACT
TTAGCATGGCTGATAAGGTCTTCTTACCATTCCAAAAGAACAGAGGACCAGAGTTGCACACTTTTGGAAAAAGC
AGGGCTTCAAGCAGCAAGCTTTACAGTATCCACAGATCCTGAGCATCGTTTGAAGCTTGCTCTTCAGCTTGGAG
AGTTAAAAATTCATACCAGTTAGCAGTGGAGAGCAGAGTCAGAACAGAAGTGGAAACAACTTGCTGAACCTGGCA
TATGTAATGTCAAGTTTGGCTAGCCAGGAGTGCTGCATCATGCAAGGATTAATGGGGCCCTGCTGCTTTTGG
CCACTGCCCTTGGAAATGCTAAATGTTGTAACAGCTAGCAGAGGGTGCAGAGAGAGATGGCAAAAAATATGTGG
CATTCATGAGCTACTTTTACAGGGGCAAGGTTGATGCCCTGCTAGAGCTCTTTAATTAGAAGTGGAGGCTGGCAG
AAGCTGCCCTTCTTGCCCCGAACCTTACTTACCAGTCAGGTTTCAAGGGTAGTGAACCTCTGGAGAGAGAACTCTCT
CAAAAGTCAATCAGAAAGCAGCAGAAATCCCTTGCTGACCCAACAGAGTATGAAAACCTGTTCCCTGGATTAAAAAG
AAGCCTTTGTTGTGTAAGAAATGGTGAAGGAAACACATGCTGATCTGTGGCCAGCCACCAACAAATACCCATGTCA
CGCCAAATGAAGAGAGAAATGTCAATGGAAGAGGGAAAAAGACTTTCAGCCCTCAAGATCTACAGCTCAACAGGAACT
TTGATGGGAAACTGCTTCTCCTACTCCGGTTATTGTGGCCTCCCAACAGCAACAAAGAAAGAAAGGATTTATC
TCGAACTAGAAGTAGATTGGATAAATTTGGAATTAGAAGATATTGACACACAGATATCAATCTGGATGAAGATA
TTTTGGATGATGCACTGTAATGCTTCCATTACCTGACTAAACAGATCATATTATATATAGGTATTGATTGCT
ACCTGACACAGTGCCTTTGGACTATGAGAAACTTCTAGATTTTTATATGTAATGCTGTGGACCCTGGGAGC
ACAAATGCCACATCATCTTAAGAAGAGTTTATGTGCAGCATTTAAATCACTGTGTTTTCTCTGTTAACTAAAACA
GACATGGGCTTTGATTTTTTTCATACTATTAGACCATATCTCATAAAACCTTTTGAATTAACAAAAA

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FIGURE 1271

MPLRLDIKRKLTARSDRVKSVDLHPTPEPWLASLYNGSVCVWNHETQTLVKTFEVCDDLPRAAKFVARKNWVVTG
ADDMQIRVFNYNLTLERVHMFEAHSDYIRCIADVHTQPFILTSDDMLIKLWDWDKKWSCSQVFEGHTHYVMQIVI
NPKDNNQFASASLDRTIKVWQLGSSPNFTLEGHEKGVNCIDYYSGGDKPYLISGADDRLVKIWDYQNKTCVQTL
EGHAQNVSCASFHPELPIIITGSEDGTVRIWHSSTYRLESTLNYGMERVWCVASLRGSNNVALGYDEGSIIIVKLG
REEPAMSDMANGKIIWAKHSEVQQANLKAMGDAEIKDGERLPLAVKDMGSCETIYPQTIQHNPNNGRFVVVCGDGEY
IIYTAMALRNKSPGSAQEFWAHDSSEYAIRESNSIVKIFKNFKEKKSFPKPDFGAESIYGGFLLGVRVSNGLAFY
DWDNTELIIRRIEIQPKHIFWSDSGELVCIATEESFFILKYLSEKVLAAQETHEGVTEDGIEDAFEVLGEIQEIVK
TGLWVGDCFIYTSSVNRNLNYYVGGEIVTIAHLDRITMYLLGYIPKDNRLYLGDKELNIIISYLLVSVLEYQTAVMR
RDFSMAKVLPTIPKEQRTIRVAHFLEKQGFKQALTVSTDPEHRFELALQELKIAVQLAVEAESEQKWKQLAE
LAISKCOFGLAQECLHHAQDYGGLLLLATASGNANMVNKLAEAGAERDGNVAFMSYFLQGVKDACLELLIRTGR
LPEAAFLARTYLPQSQRVVKLWRENLSKVNQKAESLADPTHEYENLFPGLKEAFVVEEWVKETHADLWPAKQYP
LVTPEERNVMEEGKDFQPSRSTAQQELDGKFPASPTFVIVASHTANKEEKSLELEVLDLNLELEDIDTTDINLD
EDILDD

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FIGURE 1272

ATCCAGCGCTACAATTTTCATTATCTTAAGTACATTGTACATTCTACAGAACCTGTGATTATTCTCGCATGATA
AGGATGGTACTTGCATATGGTGAATTACTACTGTGTGACAGTTTCCGCAGAAATCCTATTTTCAGTGGACCAACATT
GTGGCATGGCAGCAAATGCCAACATTTTGTGGAATAGCAGCAAATCTACAAGAGACCTGGTTGGTTTTTCGTTT
TGTTTTCTTTGTTTTTCCCCCTTCTCCTGAATCAGCAGGGATGGAAGAGGCTAGGGAAGTTATGAATTACTCC
TTCCAGTAG

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FIGURE 1273

MQRYNFHYLYIIVHFYRTCDYSRMIRMVLAYGELLLLTVS AEILFQWTNIVAWQQMPTFCGIAANLQETLVGFSF
CFLCFFPLLNNQQGWKEGREVMNYSFQ

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FIGURE 1274

AAAGCTCGCGCGGGGAAGCGGGGCTGTAGCTGGGCAGGGAGAGGCGGACGAAATCGGTAGCGATCTCGGCTGC
GGCGCTGCGCCGACGTGCCCGCGCCGCGGGGCGCGCCCTGACCCCTTCATCTTTGGGCAGGCTCGAGGGCGCGCGCA
CGGTTGGCGCTTCTGGGGCTCAAACCTCTGGGCTTGACCGGGCAGGCGCGCTCTCCCCGGGTGTAGTCCACCG
GGACCCCGCCGCGCCTAAGCGCGGGCGCCACAGAAGCGGCGGCGCCGAGACGCGCTCTGGCTCGGCCCGAC
AGCCTCGCTTGGCCGCCAGTCTTCTGCGAGCCGAAGCGGTTGTTCTTTAAAGAATTATTGAAGACGAAGGTTT
TTTTCTTTTATTTTAAATGGCTTACAGAATCTTAAATAGAAATACAGCTTTGACATGACGCCAAAAATGTTG
GTTTGACTTCCACAAATGCAGAAGTAAGAGGATTATAGATCAGAATCTCAGTCCAAACAAAGGCAACATTTCAT
TTGTTGCATTTCAGTTTCCAAATACCACTCACCTACAAAGATTTTACCAAAAACTTAGGACCAATAAATGTGA
ATGTTGGACCCCAAATGATTATAAGCACACCACAGAGACTAACCGTTGAGGAAGTGTCTGATTGGGAGTCCAT
ATACCCCTGCACAGCAATGGTTACTCAGACACATAGCAGAAGCTACTGGCTGGGTCCTGGTGATAGAAAAC
GGGCTAGAAAATTTATAGACTCTGATTTTCAGAAATAAACGAAGCAAAAAAGGAGATAAAAAATGGGAAAGGCT
TGAGACACTTTTCAATGAAAGTGTGTGAGAAAGTTCAACGAAAAGGTACAAATCGTACAATGAAGTCGCTGATG
AGCTGGTGCAGAGTTCACCAATCAAATAACCAATTGGCTGCTGATTGGCTTATGATCAGAAGAACATTAGGC
GAAGAGTTTATGATGCTTTAAATGTGCTAATGGCAATGAACATAATTTCAAAGGAAAAAARGAAATCAAGTGGA
TTGGCTCGCTACCAATTTCTGCTCAGGAATGTCAGAATCTGGAGATAGAGAAGCAGAGCGGATAGAACGGATAA
AGCAGAAGCGGGCCAGCTGCAAGAATCTCTCTACAGCAATCGCTTTCAAACCTGGTACAGAGAAATCGAC
AAAATGAGCAGCAAAACAGGCGCCCGCGCTCTGAACCTTACCATTGAGTGCATTATAATCATCAATACAA
GCAGAAAAACAGTCATAGATTGCAGCATCTCCAGTGACAAGTTTGAGTATCTTTCAATTTTGACAACACCTTTG
AGATCCATGATGACATAGAAGTACTAAAGCGGATGGGAATGTCGTTTGGCTGGAGTCAGGCAAAATGCTCTCTGG
AGGATCTGAACTTGCAGAAATCCCTGGTGCCAAAGGCTTTAGAAGGTTATATCAGATATCTCCACAGGACCTT
CTTGTTTAAATCAGGCACTACTTCTGAACCTTACCATTGAGTTTCAAATTTAGACCTGACCACTGGTGCCACCT
TACCCAGTCAAGTGAATTAACCAAGGTTTATGCTTGGATGCAGAAGTGGCCTTAGCAACTGGGCAAGTCTCTGGCCC
CAAACAGTCACCAAGTCCAGCAGTGGCGCTCTCACTGCTCCGAGTCCGAGGCGAGACCCCTGTTCGTTCAATG
ATGAAGATGAGGAAGATGATGAGGAGGATTCTCTCCCGAGAATAAAGACAAGAGAAGGCTACGTTTCAATAT
GTGATGCTCATGTGTGTGTGTAGTGTGAGCTCTGTTTTTGAATGATTGCTTCAGTCTTGGCTTTGTTTGCAC
TGTGTGTTCAAGTAAAACTAGAGAAACACAATAAGCAAAATCACATGAAGGCTGAGATGATTGAGATGAAAGTTAA
CATAGTGTGAATGAAAGTCTGGCCAACAGAGCAGTAGATGATATAACAAAGAAAGCATGCTTCTGAGGAGATAG
TGGGATAATCCCTGAAGAGTTGGCAGTGTGAGTGCAACTCATTTATCTTGTGAGGTGGGATTTTGTGTTCC
TCACCCATGTAAATTATCTTGAATTTGAGATTGCTACACGGAGCAGTCTTGACGATCGTGTCTGAGGTTT
CTCTTCTTGCCTGGAAGTGGCTTTGACAAGGCAGAAATGAACATGAAAAGTCCCGAGGAGGGGAGCTGTGTAG
TGAGGGATACGTAGGGGAGTCTGTGGCTGAGGGGCACAGATTGAACGTGCTGAACATAGTTGGGCTCTAGATGAG
GTGCTTTACGATCAGCTGGCTTTAGACAGCTTCTAGAAAGGAGCGAGCGCTACTTCTTAAGTACTTAAGTGACAT
TTAGATAATTTATAGTAAAGTGAATTTATTTAGCCAATGCATTTGGTGATAGAATTTACTAGGGCTACTTCT
GGAAGCCAAAATAGAAATAGCATTTCCTATGTGCATTAATACTTTGCCAGCATGCGCTTGGCAGCATCTCAAACT
TGGAGTTTACAAAGAAAGAACTGTATCTTTAGGTTAATCAAAGCTATGCATTTCAATATAGCTTTTTCATTAA
AACAGACAAAGAAACAAATTCCTATGACCAAAATGCTTGCCTACAGTTCCTGCAAGTAATTTGATGATCTCACC
CAGTGTCAAAATTTGTGAAAATGAACCAATGCTATTACTTTTGTCTTAAAGAAAGTCTATTTCAGAAATATGAA
CAGCAGTG

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FIGURE 1275

ACACACTCCCCTTGGCGCTCTCTCTCTCGGCTCCATTTTCTCGCCCGCGGGGCGGGGCTCCTGT
GGGGGGCCAGCGGATCCAGGTCCTCTTCACTGCGGGGTGAACCCCGGGGAGCCGAGAGCCGGGGGCA
GACGGCGGGGTTGGGGCGAGGAGCAGCGGCCCCAGCGAGTTTGTGGGGAAGATTAACCAAGCGGGGGAGG
GGCTGAGCAGGGAGGGGGCCTCAGGGCCCCCCCCAGCTATGGACTAACGGCTACTGGGGCGCCTCTCCAGCG
GGGGCCCGGGGGGGCCTGGGATTGGTGAGTGGGAGCCTGGGGGCCCTGGCGAGCCTCTGGTGGCGGAGACCC
CGGTGGGGGTACGGGGGGTTCCCGGGAGGCCGAGGGAACAGACATCGGGGACATTTGACAGGATAATGAC
CATCACCAGCCAGAGCCTGGACAGGGCCAGGCCAAGAAACACGCCCTTAACTGCCACCGAATGAAGCCTGCTCT
CTTTAGCGTCTGTGTGAATCAAGGAGAAAAACCGGCTCAGCATTGCGAGCTCCAGGAGGAGGAGCGGCTGGA
CCACAGCTGATGCGCTTGGACAACATGCTTCTGGCAGAGGGTGTGGCTGGGCCGAGAAAGGGGGCGGCTCAGC
AGCAGCAGCTGACAGCGCTGACGCTCTGGTGGTGGCGGTGCCCTGACACTCCATGCAACTCTGGACTATCG
CAGCAACTTGGCCAGATCCGTACATATACCACTCGGAACGAGAGATGAGCAGGCTGTAATGAGTTTAC
GACCCATGTCATGAACCTGCTGAGGGAGCAGAGCCGACACGAGCCGTGGCCCCAAGAGATGGAACGATGTT
GAGCATCATTCATCGAAGTTTACGCGCCATCCAGATSCAGCTGAAGCAGAGCACTGCGAGGCTATGATGATGT
GGCTCCCGTTTCTGGATGCCAGCAAGAGCGCTAACTTCAGCAGCAGGGCCACTGAGGTCCTAAATGAGTA
TTTCTACTCCCACTGAGTAACCCATATCCTAGTGAGGAGGCCAAGGAGGAGCTTGCCAAAGGTGTGGCATCAC
CGTGCTCAGGTTTCCAACCGGTTTGGCAACAAGAAATTCGCTATAGAAGAAACATCGGAAGTTCCAAGAGGA
GGCAACATCTATGCTGCAAGACAGCCGTGTCAGTCACCCAGGGGGGCCACAGCAGCACCAGCTCCCGGACACC
CCCTTCTCTGACAGGCTCTGGCGGCTCTTTCAATATCTCAGGATCTGGAGACATGTTTCTGGGGATGCTGGGGT
CAACGGAGATTCTATTCTGCTTCCAGGTGGCATCACTCCGACGCTGATGGGGCCAGGGGGCTATGGGGATAA
CCTCGGGGAGGGCCAGATGTACAGCCCAAGGAAATGAGGGCAATGGCAGCTGGCAAGAGGCTGTGACCCCCCTC
TTCAGTGACATCCCAAAGGAGGACAGGGAGTGTTCACCTCTGATACCTCCAACCTGATCTGCCCCCAGGGTC
ACAGGGGTGGGGGCTCTACAAGGCGACTCTTGAAGAGGACGAGGCTTCCAGAGGACAAACCCCAATACAGGAG
AAGCACAAGACAGAGAAGGGCAATGGGGTCATCGCTCCCTAATGAGACTGTCTGTCTGGGGGTGCTAATTAC
ATGGCAGGAAGATGGGGCCCCAAGGGGAGTGTGGGGTCTGTCTCTCCCTTTTCCAACCTTTTCTCTCTCG
CTTCTTCTTACACAGAAACATGCACATACCCAGAAACCTATTTTCTCAGACCCCTTTTCTCCTCTGTCTTCT
TCTCTCCTCTCCACACCTCACACACATACTCCCACTTGAACCTATTTCTGTTTCTCTCTGGGCTCCCCAC
TTTCCCTTCCCCACCCCTTGTAGGCTCTGGAATCTGGAGAGCGCCAGCCTGCCCAATCAGAGATGCCAAAAAT
GGGGACATGACTCTGGACAGGACATGGGACAGCCCCATGCACTCCCACTCTGCCCTCCAGACAGCTTA
CTTACCTCATACGCACTACTCTTAAACCAATAGAATCGCTTGGTGGACAGAGTGTCTGACTCAGATATCTACC
TCGGAGGGAGTTTCTGCTACTTTAGGGAATTATTGACTGGGCTTTGGGGTTGAACCTTTTTTTTTTTTTTTTT
AAGAAGAAAAAGAACCCCTGGGATCCATCTGTTTTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT
GGGTGGTTCTTAATTTTAAATTTAGTTTGGGGAAGTAGCTGTGTTTTTTTTTTTAAATAAATATGTTGATTCT
TGCTCTTTTTTTTATTCTTACTTTCCATATTAGGGGTGATAGCCAAAGGGGTTCTGGTAAGAGAAAGGGGACA
AACAGAACTGTGAAGAGGCCCTCGCTGGTCCAGGCTGTCCATCAGGAAGTAATTTTACAGGGCACAAGCTT
TGCCCCCTAAAAATCCATTAGGTGTTCTTTGTTTCATGCAGGCAGGTTTCTGCCCATTTGATGTGGAGGAGTGA
GGGCTTGCCCTGTGCGCTCTCATCCCCCTCTTCCCAACACCTTGGGCAGGGCTGAGACTCAGTAATTTTGAGG
AAATGAAGATGCACTTCCCTGTGAGTGACATGCTCTTAAATTTTAAAAAACTCTATTGAAAAATGGAGG
GGGAAGAAATGGGAAGGGAGTATTGCAAAATATGTTAAATATGGGTGGGGTGTGTTATATGATCTTCTCTCAA
TTTCCGCATAAATGAGTATCTTTTGTACACCAAAATCAAGGGGTAGGAGAGGGAGGAGTTGCAAAAAGCC
AGATGTGGGGAAAAAGTAACATCAACACTGTCCCTCTCAGCCCTGAACCTTACCATCTGATCCCCCTCAGACAT
TCTCAGGATTTTACAAGACTGTAGAGTGGGGAACCCCTCCCAATAAAGATCGGGCAGGACTGGGACAGGTTG
GAAATGTAGTGGGTGGGAGGAGCATGGCCGGGGGAGCTCTCTCCCTCATGTAACTGTGTAGTTT
CACAGAAAAAAAATGAGTTTTTAAATAAGAAATTTCTTT

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FIGURE 1276

[illegible]

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FIGURE 1277

MRGANAWAPLCLLLAAATQLSRQQSPERPVTTCGGILTGESGFIGSEGFPGVYPNSKCTWKITVPEGKVVLNF
RFIDLES DNLCRYDFVDVYNHANGQRIGRFCGTFRPGALVSSGNKMMVQMISDANTAGNGFMAMFSAAEFNERG
DQYCGGLDRPSGSFKTFPNWPD RDYPAGVTCVWHIVAPKNQLIELKF EKFDVERDNYCRYDYVAVFNGGEVNDAR
RIGKYCGDSPAPIVSERNELLIQFLSDLSLTADGFIGHYIFRPKKLPTTTEQPVTTFPVTGTLKPTVALCQOK
CRRTGTLGNYCSD FVLAGTVITITTRDGS LHATVSIINIYKEGNLAIQQAGKNMSARLTVVCKQCPLLRGLN
YIIMGQVGEDGRGKIMPNSFIMMFKTKNQKLLDALKNKQC

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FIGURE 1278

GAACCGCCATCTTCCAGTAATTCGCCAAATGACAAACACAAAGGGAAAAGGAGAGCCACCCGATATATGTTCT
CTAGGCCTTTAGAAAACATGGAGCTGTTCCCTTTGGCGACGTATATGCGAATCTATAAGAAAGGTGATATTGTAG
ACATCAAGGGAAATGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTACCATGGCAAAACTGGAAGAGTCTACA
ATGTTACCCAGCATGCTGTTGGCATTGTTGTAAACAAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAAATTAATG
TGC GTATTGAGCACATTTAGCACTCTAAGAGCCGAGATAGCTTCTGAAATGCATGAAGGAAAATGATCAGAAAA
AGAAAAGAGCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGITCCAGCCTGCTCCACCCAGAGAAGCACACTTIG
TGAGAACCAATGGGAAGGAGCCTGAGCTGCTGGAAC TTATTCCTATGAATTCATGGCAATATAGGTGTTAAAAA
AAATAAATAAAGGACCTCTGGGCTA

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FIGURE 1279

MTNKGKRRATRYMFSRPFRRKHGAVPLATYMRIYKKGDIVDIKGMGTVQKGMPHKCYHGKTGRVYNVTQHAVGIV
VNKQVKGKILAKRINVRIEHISHSKSRDSFLKCMKENDQKKKEAKEKGTWVQLKFQAPPPREAHFVRINGKEPEL
LELIPYEFMA

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FIGURE 1280A

CCGCGGGCGGGGCCGGCTTGCAGTTCACGTGACCCGGCGCTATTGGCTCGCTCGCGGAAGTAGTCTCATATTCCGG
GTCAGCGCGGGGTCTCCGGGCGCCCTGACGGCGGGCAGGCTGTGCCATCCCGCGGAGCGTGGGGATGTCAGC
TGTAACCACTGCACCCGCTTCGGGTTCGGGTCCAGCAGSTGGTGCCCTGCAAGCTGGAGCGGAGCCGGCTCTGTCGGCGGG
GGCGTGACGCGCTTTTCGTGGCGGGCGGCTGCAAGGTGGAGCGCTTCGCGGTGGCGCGGACGAGCTGTGCGGACG
CGCGGTGCGCCTTCTCCACGCTGGGCGGGGTGTTGCGCCTGGCCTACAGCGAGGCTGGAGATTATTTGGTAGCAA
TTGAGAGAAAAAAGCAAGCTACATTCTACGTGTTATGTGAAGTGGAGAAATAAAGGACTGAAAACTCTCGTG
TGTGTATCCGAATGATTGGGCATAATGTGGAGGGACCATTCAGCAAGCCCTTCAGAGACCAGATGTACATTATTG
AAATGCCGCTTTCCGAGGCCCTTGTGCATTTCCTGTTGCCCTGTGAAAGGAGACCTTCTGCTTGGCTGCACAA
ATAAATTAGTCTTATTTAGTTTGAAGTACCAGATCAATTAATGAGGAATTCCTACTATTGGACTTTGAACGTTCTT
TAATTTATACATAGATAATATCACTCCTGTTGAGGTTTCTTTTGTGTTGGATATGTTGCTGTCATGTCAGACT
TAGAAGTCTTAATCGTAAACTGGAGTCAGGCCCTAAAAATGGAGAGAGATTCCACCACCTACACATAAGACCA
ACAAATCGAATAAGACGGGACAGAGAAGGCATCAGTAATGAAATTTACAGCTTGAGTCAGATGATTTTGTCTACT
GCCAGAAGCCCTGGAACTTCTTGGTGAAGAAAGTGAACGCTGGATTATCTGTTACACTGGAGCTACCGGGAT
TAGCTGTAGTGAAGAAAGAAAAATATTTCCCACTTTTCAGCACCTGCTCTATAGACGTTTTCCTCTGATATTTTCGTCCT
ATGCTTTGCTGTGATGACATCAAGCTACATTCCCTCCAGCTGCTACCCATTACACAGACCGGTCTCTTACATCTG
ATGGAATAAATTTGCTCTCAGGAATAAGAAATGCTGAGTCTTTTGTCTTTTCTCCTTACCTCATGTGGGCTATC
TCTACATGGTTGTCAAATCTGTTGAATGTATGTGAGTCTACCAAGTATCTCTGAAAGCTCTCAGCAGGCAGTACTCA
CGCCACAATTTTTGCACGCTATTACAAGTAAACCTGCGAGTGTTCCTACTGCGGTGAGCTGCGCGCGGACGCTC
GTGAGGAGGACCCGTACATGGACACACCCCTGAAGGCTTGCCCACTTCAGTATGGATGCTGTGCTTTAAGAA
TACAGCTTTTCATAGGCTTGAAGGCATCTGTCACTTTAAAAACACATCACTTTTGACTAAAGCAGAACCTG
AAGCCATTCCAGAGAGAAGACAGTCAACCAAGAGGCTTCTTCGAGAAGGATACCAAGTGTAAATCAAAATAC
CTCCTGTAGCTGAGGCTGGGTGGAATTTGTATATTGTGAATACGATCTCACCAGTGCAGCTGTACAAAGAGATGG
TAGACTATAGCAATACCTATAAGACTGTCAAAACCCAGAGCTGCATTACCTTCTCAGTGAGGCTCATCTGTTAG
TGCAGCTTGGCCTGATGGATGCCACTGAGCTGGAACCTGGAGAGAAGGCACAGCTTTGGAAGCAATTAAAGGAAA
GCTGTGGGCACTTGGGACTGTTACAGCAGGCTTGACTCCCAAGCATCTCATCTCACCTTGCCATACTATAAGA
TGCTGGTTTGTCTATGGCTGAAGTTCTGGCCCGCACGGACTGGACAGTAGAGGATGGATTACAGAAATACGAGA
GAGGATTAATCTTTTACATTAATCACTTATTAAGAAACCTGGATGAAGAAATTAATGAAGAAATAGCAGCAA
AAGTGGTTCAGATGTTTATGTGGCTGAGCCAAAGCAAGTGCCCCATATTTCTCTGTAGTCTCTATAGAAGATA
TTAATCCTTTAAGCTGCCATGAGCTATCAAGGAAGCTGGATCTCTGGGTTTTCATCGATCTTAGTGACATTGA
CCAAGGCGAGCAGTGCCCTGTGAAATGGGAGATCTTGACATGCAAGAAATGAAATGAAAGCCATTCAGAGATGA
AGTGTGATGTGGCTCTCACTTCTGGAACCTCGGCTGTTGATTTCAAAGAGAAAGGAGAGATTGTTCCACCGAGC
TTGCACTTCACCTTGAAGGAACTCAGCTGGATTGCTTGTGGCTTCAGTCTGGGCTTGCAAGAAACACAAAA
TTGGAATGAAGAGCAGATTCCTTTTTAAGGTGCTTTGTGCTAAGGATGAAGATACAATTCCTCAGCTCTTGG
TAGACTTTTGGCACTCAGCTAGTGGGATGCTCCAGCATGTGGTACTTCAGGAACTCTTTTCAAACTCACAT
CACAGTACATCTGGAGATTGTCTAAGAGGCGAGCCTCTGACACCAACCATTCGCAACATCGGAGGATCTGATAA
ATGCTGTAGTCAATTATGGCTTAATTTATCCATGGGTTACGCTGTAATATCACTCTGATTTTCTTAGCTGATAAAA
ATTAACAGAGAATCTTTCAAAATTCAGTCTCTTATATGTGGTCTCTTCAATTGACATAGCTTCCATTATTCGGT
TCTTGGAGCCACTTTCAGAAAGACATATTGCCGGCCTCAGTGTCCATGTTCTGTGTGTCAGACGCTTGAAGAGT
ATGAACAGTGCATAGACATACGTTGTAGAGAGATGCCGGAGGCGAGTGCATTCATATGCTAATCATGCAATGAAG
AAGAGAACCGGACTCTGTGGTGGAAAAAAGCTGTGCTGAACTTTGTGAGAGAAATAAATGTGGTGGAGAGAAAT
ATCAACTCTACCTGTATCAATTAAGAAAGAACTTGTCAATTGTGCTGTGGAACCTGAAGCTGAAGGATTTCTATGA
ATGTTCTCCGAGAAAGTGTGATCGTCAACATTTTCTTGCCATACTTCTATGCACTGCAAGTCCGAAAGAACCATG
CTTAAGAGTATCAATTTGAAAAATACCAATATGGCATTGAGACTGAATTTCTAAAAATGAATGCCAAAGTACAA
GTAGAGGAGTTTATTTATTTATATATACACACACACACACACACACACACACATATATGATACAA
ATGCTTTCAGGCTGCTTACCTTACCSTGTAGTGGTAACTATTCACTTCTTAATTTATGACCTCAATCAATTAAT
TGCTTAGAATGTAAAGTCTTTAAGACATAAGAATTCCTCAAGAGGCCATACATTTTTTAAGGTGGGAGTTGA
CTTTTATTCAGGAACAACTAGCTTCACTGTTGTTGGAGACATGACAATCAATTTTCACTCCAGAACCACTTTA
AGGAACATTTTACAAGTATGCTTGAAGAAATGTCACTAATGTTGCCAGATTTTATCTTCTTGATTTTTCAGAA

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FIGURE 1280B

TTTCTCTATGTTTTGAGAAAGATGTTAATGTTTGGCATGGTAAAGATTTCAAACCTCATTTTTTTGTTCCT
TTTCTTGTACITTTAAGAAAACTCATGCTCTGTTTCTCTGAATCAAATGAAGTAGAAGTTTACAAAGCTAACTT
TCTTCTTGCTAGCTATTAAACATGATTTGTCAAATGCATGTTTTTTCAGCCAAAGCCTTGTTCCATTTTGT
GATGTGTA CTCTTGCTCTTTAGCTAGAGTGATGTGAAATAAAGAAATACATCATTGTATTACAAAAAAA
AAAAAAAAAAAA

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FIGURE 1281

MVQLYNLHFFGSQQVVPCKLEPDRFCGGGRDALFVAAGCKVEAFVAGQELCQPRCAFTLGRVRLAYSEAGDY
LVAIEEKNKATFLRAYVNWNRKRTENSRCIRMIGHNVEGPFSAFRDQMYIIEMLSEAPLCISCCPVKGDLLV
GCTNKLVLFLSKYQIINEEFSLDFERSLIHIDNITPVEVSFCVGYVAVMSDLEVLIVKLES GPKNGERVHHP
HKTNNRIRRTEEGISNEISQLESDDFVICQKPLELLGEKSEQSGLSVTLESTGLADEKRKYSHFQHLLYRRFAPD
ISSYVLSDDIKHLSLQLLPIYQTGSLTSDGKNLSQEKELLSLFCFFSLPHVGYLYMVVKSVELMSVYOYPEKSQQ
AVLTPQFLHVITSNNLQCFTVRCSAAAAREEDPYMDITLTKACPPVSMDVICALRIQLFIGLKAICHFKNHIILLTK
AEPEAIPERRQSPKRLLSRKDTSVKIKIPPAEAGWNLYIVNTISPVQLYKEMVDYSNTYKTVKTQSCIHLLSEA
HLLVRAALMDASQLEPGKEAELLEAFKESCGHLGDCYSRLDSQHSHTLPYYKMSGLSMAEVLARTDWTVEDGLQ
KYERGLIFYINHSLYENLDEELNEELAAKVVQMFYVAEPKQVPHILCSPSMKNINPLTAMS YLRKLDTS GFSSIL
VTLTKAAVALKMGDLDHMRNEMKSHSEMKLVCGFILEPRLLIQQRKGQIVPTLALHLKETQPGLLVASVLGLQK
NNKIGIEEADSFVKVLCAKDEDTIPQLLVDFWEAQLVACL PDVVLQELFFKLTSQYIWRLSKRQPPDTTFLRTSE
DLINACSHYGLIYPWVHVVISSDSLADKNYTEDLSKLQSLICGSPFDIASIIPFLEPLSEDTIAGLSVHVLCTR
LKEYEQCIDILLERCPEAVIPYANHELKEENRTLWWKKLLPELCQRIKCGGEKYLYLSSSKETLSIVAVELELK
DFMNVLPEDGTATFFLPYLLYCSRRKKPLT

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FIGURE 1282

GGCACGAGGGCTTCTCCTGCGCCTCCTTTTCGCCACGACTAGCGCCTTAGGCCAGCTCGGGGGATGTGAGAGCC
GAAGCCCTTAGACTGCCAGGCACAGAGTCGGGTGGGGATTGTGACGCCAAGCCTCGGCTCCAGCTCCGCAATCT
GGGACTCACCCGAGCGACCCAGGCCGACGCAAGTTCGGGCGGGACGGCGGCCGCGCGCTCAGGCTCAGCT
TCGCTGCCCGCCGAAGATGAATCCGGCCTCGGGCGCCCTCCGCTCCCGCGCCTGGGCAGCAAGTGATCCAC
GTCACGCAGGACCTAGACACAGACCTCGAAGCCCTCTTCAACTCTGTTCATGAATCCGAAGCCTAGCTCGTGGCGG
AAGAAGATCCTGCGGGAGTCTTTCTTTAAGGAGCCTGATTGGGGCTCGCACTCGCGCCAGTCCAGCACCGACTCG
TCGGGCGGCCACCCGGGGCCTCGACTGGCTGGGGGTGCCAGCATGTCCGCTCGCACTCGTCGCCCGCGTCCCTG
CAGCTGGGCACCGCGCGGGTGCTGCGGGTAGCCCCGCGCAGCAGCACGCGCACTCCCGCAGCAGTCTTACGAC
GTGACCAGCAGCTGCCACTGCCCCCGGGCTGGGAGATGACCTTCAGCGCCACTGGCCAGAGGTACTTCTCAAT
CACATAGAAAAAATCACCATGGCAAGACCTTAGGAAGGCGATGAATCAGCCTCTGAATCATATGAACCTCCAC
CCTGCCCTCAGTTCACACCACTGCTCAGAGGTCCATGGCAGTATCCAGCAGCAATCTCGTGATGAATCACCAA
CACCAGCAGCAGTGGCCCCAGTACCTGAGCCAGCAGAACCCCACTCAGAACCCACCCGAGGGCTCATG
AGTATGCCCAATGCGCTGACCACTCAGCAGCAGCAGCAGCAAACTGCGGCTTACAGAGAATCCAGATGGAGAGA
GAAAGGATTGCAATGCGCCAGAGGAGCTCATGAGGCAGGAAGCTGCCCTCTGTGACAGCTCCCCATGGAACT
GAGACTCTTGCCCCAGTTTACGGCTGCTGTCAACCCACCCAGATGACCCAGACATGAGATCCATCACTAATAAT
AGCTCAGATCCTTTCTCAATGGAGGGCCATATCATTGAGGGAGCAGAGCACTGACAGTGGCGCTGGGGTTAGGG
TGCTACAGTGTCCCCACAACCTCCGAGGAGTCTCTCAGCAATGTGGATGAGATGGATCAGGAGAAAAACGAGGA
CAAACACCATGAACATCAATCCCCAACAGACCGTTTCCCTGATTTCCTTGACTGTCTCCAGGAACAAACGTT
GACTTAGGAACCTTTGGAATCTGAAGACCTGATCCCCCTCTTCAATGATGTAGAGTCTGCTCTGAACAAAAGTGAG
CCCTTTCTAACCCTGGCTGTATCACTACCATTTGTAACCTGGATGTAGCCATGACCTTACATTTCTCGGGCCTCTT
GGAAAAAGTGATGGAGCAGAGCAAGTCTGAGGTGACCACTTCCCGCCTCCATGACTCGTGTCTCCCTCTTTT
ATGTTGCCAGTTTAAATCATTGCTGGTTTGTGATTGAGAGTAACCTAAGTTAAACATAAATAAATATTCTATTTT
ATTTTCTGCAAGCCTGCGTCTTGTGACAGATTATACAGAATTGTGTCGACAGATTGATTATGACAGAACTACTT
TCTCTTTCTCTGCTGCCCATGGCTAAGCTTTATGGGTGTTAATTGAAATTTATACACCAATTGATTTTAA
CCATAAAAAGCTGACCACAGGCAGTTACTTCTGAGGGCATCTTGGTCCAGGAAATGTGCACAAAATTCGACCTGA
TTTACAGTTTCAAAAACGTATTGATGACAGTAGTACCAAATGCTTTAAAAACTATTAACTTGAGCTTTAAAAA
TCATTGTATGGATAGTAAATTTCTACTGTATGGAATACAAATGTAATTTTGAATCCAAAAA

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FIGURE 1283

MNPASAPPPPLPPPGQQVIHVTQQLDLDLEALFNSVMNPKPSSWRKKILPESFFKEPDSGSHSRQSSTDSSGGHPG
PRLAGGAQHVRSHSSPASLQLGTGAGAAGSPAQQHAHLRQQSYDVTDELPLPPGWEMTFTATGQRYFLNHIEKIT
TWQDPRKAMNQPLNHNMLHPAVSSTPVPQRSMVVSQPNLVMNHQHQQQMAPSTLSQQNHPTQNPPAGLMSMPNAL
TTQQQQQKLRQLRIQMERERIRMRQEBELMRQEAALCRQLPMEAETLAPVQAAVNPPIMTPDMRSITNNSDDPFL
NGGPHYHSREQSTD SGLGLGCYSVPTTPEDFLSNVDEMDTGENAGQTPMNINPQQTRFPDFLDCLPGTNVDLGTLE
SEDLIPLFNDVESALNKSEFFLTWL

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FIGURE 1284

CTTCCTCTTTCACTCCGCGCTCACGGCGGCGGCCAAAGCGGCGGGGACGGCGGCGGAGAACGACCCGGCGGCCA
GTTCTCTTCTCTCTGCGCACTGCCCCGCTCGGTCACTAGTCGGCGGGCGGGCGCCGGGCTTGTCGTACAGACCTC
GCGCTTGCGGCGCCAGCGCCAGCGGCGGTAGCTAGCGTCTGGCTGAGAACCTCGGCGCTCCGCGGCGCGGGC
ACCACGAGCCGAGCCTCGCAGCGGCTCCAGAGGAGGCGAGCGAGTGAAGGAGTCCGAGGGGTGGCGGGGCGAGGT
GGTGGCGCGCGAAGATGCTGCCAAGCAAGGATCGTATGGCCAACGAGACACAGCAAGAACATCACCAG
CGCGGCACTGTCGCCAAGACTCGAGAAATGCCCCGAGAGAGAGCGCTGTAGGACCCCTGGTTATTGGCTCTC
TTCATTTTTGTGTCTGTGGTTCTGCAATTTCCAGATTATTCAAAGTATCAGGATGGGCATGTAAGTGACTGA
CCTTAAGATGTTTCCATTCTCCTGTGAATTTAACTTGAACCTATTCCTGATGTTTGATACCCCTGGTTGAAACA
ATTCACTAAGCATCCTGCCCTCAGAAATGACTTTCCTATCATGCTTCATGTGTCAATCCAAGGTTTCTTCATGAGT
CATTCCAAGTTTTCTAGTCCATACCACAGTGCCTTGCAAAAAACACCCATGAATAAAGCAATAAAATTTGATTG
TTAAGATACAGTAGTGGACCCCTACTTATTCAGTCAATTAAGAGTAAAGTTTTTTTATGTGGTTATTAACAGAT
GAACAATTAGTCTAACTCTGCATAGACAGGGTCTAGATTTTGTTAACCCAAATGTATAACTGCAGTTAGCTTAAA
TTACAATTTGAAGTCTTGTGGTTTTATATAGCTAGGCACCTTATTACTCTTTTGAAGTGAAGCACACTCCCT
ATAGGTTTCATGTAAGTCTCTGTAATAAGGTGCTTATAAATGGAACAACACACAGCCTAGTTTTGCCACAACCT
TTAGCATCTAAAAAGTTTTAAAGCTTCTAAATGTCTAATAAAGGGAGATGCTTATAGCCACAACATCTATT
TACCAATATTGTTTTCCATTACACTACCTTGGAATTTGTCATGAGTGAGTATAGTAACCAAGATGCCATAAAAAA
AACTTGATCGTTTTCTGACTTAATTAGTTACTGTGGTTTCACTAAAAGCTACCGTGGTGAGTGAACTCAGTCAAG
GGAAGGTTTGTGTTATGTTTACATTTTATCCACAGAATTTTTAATATATCAAAGGGGTTTACTATGCCAACAA
AATTCTAGGGAAAAATACTGCTAAAAATGGATGCCCTCATCAGAACATGCTGTTGAGTCCAATGTGCCATAAGACA
TTTTAGCATGTTAAATAGCACTTTTAATAGCAAAAAAGGCACATCAACTGCGAAGTTATCCTTAGTTTGCAAAT
GCTTTTTCTAGATTAAATGATTTTCAATCATTAGGGTACTAGACATCAGCCTAAAGTGGCATCTGGAATTGAA
TGGATTTACTGATAATGATCAGTCTTTAGTCTCCCTTTGTTATATGACTTTATAGGTTATGATTGATCAAATTT
ACGTTTTACTAATGTAAGGGTGAGGGTCATAGGGCAGGTTTTGGGTTTTCTAGTACTGTTGAAAATGCAAGTA
TTGGCTATTGTTATACTTAGCCATAAATTTGGTGA AAAA AACCTGAGCAGTGTCTATGTATTAAATGCGTTGGAAA
GAAAGCTGCTTTGTGTTGCTTTGTTAAATGCTCAGGATATTTCTTTAAAAATAAGCTGTTTAAAGAGGAACAGA
AGGGAAATCTGCTACCTAGTCTATACACAGCGTGAACCTCACAGGGGCTTCTGATACCCCTCAAAATGGAAGAC
AGTAAGGGAGCAGAGTGGTTAAGGACTTTCAGGAACCTTAACATTTCTGGAATAAGGAATGAATCAACTGACCTTG
GGCCAGCAGGTTTTTAACTAAATTTGTTACTTGCCCTTTCTCACCAGTTAATCAGTCTCTGTACTTGTTCCTTT
TGTGAACAAGTGTCTTGTTAACTAATTTCTGTTTTATGGTTGTGCTAAATTCATAGCAGGTGCTTATTTCTTG
TTTTAGTCAAAACATTCCATATCAGAAATTTTCCTGGTTTACTATAGATATTGGCTTAAAGTTGTGTTGTGT
TTTTTAATGTAAGTGTCTGATAAATTTGACTGTTAAATTTGCTATAGCTAGCAATCATTTTACATATGTA AAAA
ATTGCATTCCCTTTGTATTTCATGTGTAAATCACAATTAAGTGCAGTTTATATTCAAGTTGGATTATGCATGTT
TAGGTAACGAAAGCTGTGCTTACTTGATTTATCTTTAAAAATAAAGTTCCTCGAATATTGAAAAA AAAAAA
AAAAAAAAAAAA

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FIGURE 1285

MVAKQRIRMANEKHSKNITQRGNVAKTSRNAPEEKASVGPWLLALFIFVVCGSAIFQIIQSIRMG

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FIGURE 1286

GCATGAGGAGACGTGTAGGGGCCGGGTTTCGGCCCTGGTGAACCTCACC CGAGCGGTTTCTCTTTCCGGGACAAC
ATGGCGCCGTCCACGCCGCTCTTGACAGXXXXXX XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXGGAATCTGGGAAGAA TTGCAAAGTCTGTATCTTTAGTAAGGATGGGACCTTG
TTTGCC TGGGGCAATGGAGAAAAAGTAAATATTATCAGTGTCACTAACAGGGGACTACTGCACTCCTTCGACCTC
CTGAAGGCAGTTTGCC TTGAATTCACCCAAAAA TACTGCTGGCAACGTGGCAGCCTTACACTACTTCTAAA
GATGGCACAGCTGGGATACCCAACTACAACCTTTATGATGTGAAAAC TGGGACATGTTTGAAATCTTTTCATCCAG
AAAAAATGCAAAATTTGGTGTCCATCCTGGTCAGAGATGAAACTCTTTGTGCCCGCAATGTTAACAAATGAAGTT
CACITCTTTGAAAACAACAATTTTAAACACAATTGCAAAATAAATTGCAATTGCAAAAAAATTAATGATTTTGTATTA
TCACCTGGACCCCAACCATAACAAGTGGCTGTCTATGTTCCAGGAAGTAAAGGTGCACCTTCATTGTTAGATTA
TATCAGTACCCCAACTTTGCTGGACCTCATGCAGCTTTAGCTAATAAAAGTTTCTTTAAGGCAGATAAAGTTACA
ATGCTGTGGAATAAAAAAGCTACTGCTGTGTGGTAATAGCTAGCACAGATGTTGACAAGACAGGAGCTTCCTAC
TATGGAGAACAACTCTACACTACATTGCAACAAATGGAGAAAGTGCTGTAGTGCAATTACCAAAAAATGGCCCC
ATTTATGATGTAGTTTGGAAATCTAGTTCTACTAGATTTTGTGCTGTATATGGTTTATGCCTGCCAAAGCGACA
ATTTTCAACTTGAATGIGATCCTGTATTTGACTTTGGAAC TGGTCTCGTAATGCAGCCTACTATAGCCCTCAT
GGACATATATTAGTATTAGCTGGATTGGAAATCTGAGGGGACAATGGAAGTGTGGGATGTGAAAAACTACAAA
CTTATTTCTAAACCGGTGGCTTCTGATTCTACATATTTTGCTTGGTGCCCGGATGGTGAGCATATTTTAACAGCT
ACA TGTGCTCCCGAGTTACGGGTTAATAATGGATACAAAATTTGGCATTATACTGGCTCTATCTTGACAAGTAT
GATGTGCCATCAAAATGCGAATTA TGGCAGGTTTCTTGGCAGCCATTTTGGATGGAATATTTCCAGCAAAAACA
ATAACTTACCAAGCAGTTCCAAGTGAAGTACCCAATGAGGAACCTAAAGTTGCAACAGCTTATAGACCCCCAGCT
TTAAGAAATAAACCAATCACC AATTCCAAATTCATGAAGAGGAACCACTCAGAATATGAAACCACAATCAGGA
AACGATAAGCCATTATCAAAAACAGCTCTTAAAAATCAAAGGAAGCATGAAGCTAAGAAAGCTGCAAAAGCAGGAA
GCAAGAGTGACAAGAGTCCAGATTGGCACCTACTCCTGCCCCACAGAGCACACCACGAAACACTGTCTCTCAG
TCAATTTCTGGGGACCTTGAGATAGACAAAAAATCAAGAACCTTAAAGAAGAAACTGAAAGCAATCGAACCACTG
AAAGAACAAGCAGCAACTGGA AAAACAGCTAGAAAAAATCAG

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FIGURE 1287

MQNWCPSWSEDETLCARNVNNEVHFFENNNTIANKLHLQKINDFVLSPGFPQYKVAVYVPGSKGAPSFVRLYQ
YPNFAGPHAALANKSFFKADKVTMLWNKKATAVLVIASDVKTGASYGGEQTLHYIATNGESAVVQLPKNGPIY
DVVWNSSTEFCAVYGFMPAKATIFNLKCDPVDFGTGPRNAAYYSPHGHILVLAGFGNLRGQMEVWDVKNYKLI
SKPVASDSTYFAWCPDGEHILTATCAPRLRVNNGYKIWHYTGSI LHKYDVPSNAELWQVSWQPF LDGIFPAKTIIT
YQAVPSEVPNEEPKVATAYRPPALRNKPIITNSKLHEEEPPQNMKPSQSGNDKPLSKTALKNQRKHEAKKAQEAR
SDKSPDLAFTPAQSTPRNTVSQSI SGDP EIDKKIKNLKKLKAIEQLKEQAATGKQLEKNQLEKI QKETALLQE
LEDELEGI

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FIGURE 1288A

GGCCGTTGCTCCAGGGAAGTGC AAAATATCTTCATCCACCCACATTAAAAACGCAGTTGGAGATAAATGGA
CGCAATAACTTGATTGACGAGAGAACATGGCCATGTTGGCCGACCAATGCAACTAGCCAAATGCCATGATGCTT
GGTGCCCATTAACACCCGTGCCAATGTTTTCAGTTGCACCAAGCTTAGCCACCAATGCATGACGAGCGCCCTT
AATCCCTAICTGGGACCTGTTTCTCCAAGCCTGGTCCCGGCAGAGATCTTGCCGACTGCACCAATGTTGGTTACA
GGGAATCCGGGTGTCCCTGTACTCGACGTGCTGCAGCTGCTGCACAGAAATTAATGCGCAACAGACAGACTTGAG
GTATGTCGAGAGATACCAAGCTGGCAATTGCAACCGAGGAGAAATGATTGCTGGCTTTCATCTCTGTCGACAGC
ACRAATGATTGACCAATGACRAACAGTCAGTCAGTGTGTATGGATTACATCAAAGGGAGATGCTCTCGGGAAGAG
TGCAAAATACCTTTCATCCCCCTGCACATTTGCAAGCCAAAGATCAAGGCTGCCCAATCAACAGGTGCA
GCTGCACAGGCTGCAGCCACCGCAGCTGCCATGACTAGTCGGCTGTCAAATCACTGAAGCGACCCCTCGAGGCA
ACCTTTGACCTGGGAATTCTCTCAAGCTGTACTTCCCCATTACCAAAGAGGCTGCTCTTGAAAAAACCAACGGT
GCCACCGCAGTCTTTAACTGTTGATTTTCCAAATACCAACAGGCTCTAGCCAACTGCAAGTTACAACAGCATACA
GCATTTCTCCACCAAGTTCCTATGGTGACGGTGCTACGCCAGCCACTGTGCTCGCAGCAACCAATCTGCCACA
AGTGTTCCCTTCGCTGCAACAGCCACAGCCAACCCAGATACCCATAATATCTGCCGAACATCTGACTAGCCACA
TATGTTACCCAGATGTAGAATTTTCATCACTAAACAATCATGCTAAAGAGGAAAGGACAGTGTGCTTGGTTAGAG
TAAAGGACAGGCTCATTAAGCCATTTGTATATATCGTCAAGCAACACACAAAAGTTCTCTCAGCCACAGACAT
CCCATATTGCATGTTTAAACGAAGAAAGACAACTTTTCCGGAATCCACTGTCACATGCTGCCATCACTT
TGTACATTTAATGTATTTTGTGCTGAGGTGATATTCCTGCTCAAAAGAACACATTGTCTTTCTTTCTAGAC
AGAGTTATGCATTCAAAAGATGCATACCTAGTTAGTTTCCCTATATATTCATGCCATCTTGAAAGACAGCACTAGG
TGTAACCATGATCTTATATGTTTGGTACGCTGTAGACCAAGATAATAATTTTAAAAAATAGTTTATTTCTT
TCAAGGTTTACAAATAACAAAGGTGCACCTGTATTTAAATTTGCCATTTATAGATGAGAGCGTGCATGCACAGCT
ATTTTGTGTTAAGATTAATTTTAAATGTAATAGATTGTAAGACGTGGTGAGGAGGGGACTGCACAGAGATTGAA
TGTGCCAAGCAAAACCAACTGTGTATATTTTAAAGCACATCATGGCTTAAAGTACCATGTTGTTAAGGATTCT
CATGAAGTGCCATAGACTGTACATCAAAATAGAGTATTTTCTTCAGTGTATTTGTTTTCAGAGCCACATTTTG
TGTCAATTTTGCCTAGTACTAATTCAGTCAAAGGGCACCACTTTCTTTTTTTTTTTTTTGAACCAAAAGCTGTCTCAG
AAATGGCCAAATTTAACTTTACAGTAAACAAATAGACAGCACAAACAACTCTCTCAATACAGATAAACTCACACAT
ACTGGAGATATATATAATAGATATATATAAAATTTTAAATGCAATGTAGTGTAATTTATGCATACATATA
CTGTATAACATGTTATTTCAAAGGGATTGCCATTTCTGAGACACAGTAAACAAAAAATGAGGAAATTTATTTGCT
TCTATTTATAGCCCTCTGTCAAAGTCAAAGACATATAAATGCTTTGCAAAAAATGGTTTTCAGTTTGTCTTAAATGC
TTCACTCAGCTGATCTTAAAATAGTGACTCTAAACAAAGAAAGACAGCACTGTATCATGATGACGATCAATAAC
CAAAATATGAAAAATGGGAAATGTTTAAATTAACCTAGTAATTTGGGTGGGTAAAGTACATGGGTGAATTTTATATGT
GATTTTTGTTTGTGTTTTGTTTTGCAGATTAACTGCTTATAGCCTTAGAAGCCCTTTTACAAAATTTAAAAAAT
AATAGATGTGCATTCAGTTTGTATTAAGATGAATCATCAAAGGAATCTCTTTTGTAGGTTGGATGTGTCGACG
TAGTAAAGGATATTTTGTCTCTGTTCAGCAGTTCTAAAATTTGCTGAAGTAGGGGCGCAGGTCACTGGTAGTTATA
GTATGGAAATGGGAGAAGTGAAATTCAGTTTCAATATAGAACTTTCCATACTTCAAGTTTACTGCAAGTTTATATGCTT
GAGAGAGATGCTTTCTAATATAAGACTGATGTGTGATTTTACTGATTGTACTGTACATCTATTAAAGCCTTAGA
TTATTACATTACGGGTTGGAACCCATACCAATGTAATTTTCAATCGTGTAAAGAAAGTAATGGTGACTTACATGT
TATTGATGTAGTTACATATAGAAATTAATCTATTTTCTCTGTTAAAGTAGGTTTTCATTGCTCCATATAT
TAGATTTCTATTTTCTATTAACTAATGAATACCATTTTCAGTTTATAGACTTGTTTATTAGATTTTACCAATGAA
TTTTTCAAAATACAAAAAAGTAGTTTTTCTCTATAACATACTCAGTTTGAATTCATGATGTAGTGTGCATAGA
ATATTCTGATTGTTAACTAAATGATTATATTTTACTGATTAAATATTACAGTGAAGAAATGCAGTCATTGTTA
GTTCTTGTCTAGTTTTCATTTAAAGAACAAAGATCTTTTATATGGATATCTTATAAATATATAATCATTGCTAAG
TAAGAAGTTAAGTTGTTGCTATCGCACAACTCTGGCAGACAAATGAGTAATATTTTGATGATTATTTTGTGTTG
TAAATGATTATATAAGAGATCTAGATCCTAGATATTAGAATAAAATTTATTTTCTACTATGATCCATTCAAAT
GTTAAAAATGTTTAAATTTTGAATCCCTGAGTATCAGGCTTGTTATAAAATAGCTGATCAATCAATAAA
TAGAACAGGGGCTTTTGTGTAATTCAAATATCTCAAAGTTTACGTAATAGAAATTTATAGCGTGTGCGAAAC
TCTTGAGGGGTTGATTATGCTGCAATTTAGCATGTTGGAACGCTGAGGGAGAAGGTTGACTTTTGTGCACTCTGTA
TATAGTCAAAGAGAAACCTGTATAATAGTAAGATCTTATTTTGAATAAAAGCTCTATAATTAACAGAGGATT
TTGTTAAGGCTAATACAATGACAGACTGAGCAAAATGCTTGCAAAAGTGGCACAGAGTTAGCACTCCATACCCC

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FIGURE 1288B

TTCAAAACATGTTGCTTTTGCTTTCTTGTTGGACAGCTTGTAGTTTGCCAGGATTTTTTCAGCTGGAAAGATACGCCA
TCCTTTCAAACCCCTCATGACTGACAAAACTCCATGGGGCCAAATCTGCCTGAAGATCATTACCAAAAAATAGCAG
GTACTTCTACCATTAAGGTGAAATCATGGATCAGATATTCTTACATTTTCAAAACTACTGCATGTTTAAACT
TCAACAAAAAGAGAGAAAGAACTATACTAAGAACATATATTATTTCAGATCAGTTTCTGCCAATTTTCAGTGGTT
TATTGTTCACAAAAAATCTTCAAAACAAGTATTGACTTTCACAAAATTTAAATCATAAACAGGCAAAACCAACA
GCACACTGTAGCTATAGTTGTTATGTGATTGTTTTTAATTGCTGTAGGATCCTGTTCTTTCAGCAGGTGAAAAA
TAAACGCAGTTCAAATTTTCATGGTTTAAATTTCAACTCAGAAGCACTCAAAAATGCAAAATGTGATAATGGGC
ACTTGTTTAAAGAATTAGTGATCCAGCCTTCCTCCAGCTGGTTAAAAATGTTGCACTTATCAGCAACCCCTAC
CACTTTCATCTGCTGAAAGGACAAATGTGCTTGGTTTTACTATTATGTAATCACAACCTTACTTTCTGCTTGTAGT
TGCTTAAATATTATGATTTTGTCTTGGGCTGCAATTTGTTTTATGCTTATTTTATTACTGCAGTAGTTGACT
TTGCTGTATGAAAAATAAAGTGAATTGCCCTAATAAACTTCTCTTCTTAAGT

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FIGURE 1289

ATGTGGAGAAAGCCAGGGGACCCACAGAAGGCTGCCTGTGGCCACGTCATAGCAAAGGAACCTTTATGGAGAGGAG
CAGGAAGTCAGAGAGCCAGCTGAATTCAGAACTCTGATAGGAGAGAAGATGTCAGTCCCTCTGGAAAGAGTTAGC
AAAGTTGTGGCCTTGAATGGGAAGGGACAGAAGAAGGTTTCAGGGTTCGAGGCTGAGGCAACAGGAAACTGCCTG
GAATGGAACTTGCCAAGGGGGATAGGAGGTGCAGGCCGGGGCTCTTTGGGAGAAAGAGCTGCACCATCTTCCAAC
ACCTGTGGGAATGCTGCTCTTGAAAACACTGCAGCAGCCAGTCATGAGCCAAGGAAGCAGACAAGAGCAACGAACA
CAGGCATTGTGCATACAGACCTACCCAGAGAAGCCAGTATCCATGGCTTTGGAGAGTTCAATATTTCAATTTTCC
GTTCAAAAAAGGCCACGCCACCGCTAAGAGTTCCGCCAGGGGCCAGCTCTCAGGAGGCCCTCTTCGGTGCCGC
CAGCCTCCCGAAGTCATCCAAGTAGCAGGCAAAATCCGGCAGCAGCAAACTAGCTCGGATTCCGGCTTCGGTTTTT
CTCCTGGCCGGCGCCACAGGCCCTCTCTCCGGGGCGGGCTCTCTCGGCTCCTTCTCAACCTCAGCCCCGGCGC
CGACCCCTTCCGGACCCCTCCCGCCCGCTCTCGTACTGTGCGCGTCACCGCCGCGGGCTCCGGCCCTGGCCCCGATG
GCTCTGTGCAACGGAGACTCCAAGCCTTGGGCTCCGCGGCGGTTAGGCCGGTTCTGGACGAACCCCTCGGAGCTG
CACTGTCTTCCCTCTCCCCACGCCCTTGCAGGCCCGCTGAGGGCTGGTGGCCCCAGGCTCGCGCACTCCGTT
CTCCCTCCCCGCTTCTCTCAGAGAGAAAGGGTGTGTGTCAGGTCCCGCTCCGTCCAGCTTGCTCCCTGTC
GAGCTTGCTGGTTTTCGGGGTAACCCGCTTCCCGCTTTGGGGTCCCTCCCGGGACGCGAGCCGTCGCAAGCTC
GCCCCAGGCCCTGGGCAGTCCGGAGTTCGGAGTGTGGAAGTTGCCGCTTGACGTACCCGGCGGGAGAGCA
CGTTTGACCGCTGCTGCTCATCTCTCTCCAACCTCACTTTTCTAGACCGTTCTCTTACTTTCTGCTCCCGCTTT
GAATTGGGCACCTTCGCTTTCACCTCTGTATTAATAATTTTCATTGGCCTGGAGTCTTTCTGA

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FIGURE 1290

AGGCATAGCAAAATGAATCTAAAAAGTTATATGGAGCACAGTTCACCCCTGAAAGTTGGCCTTACAGAAAAATGGAAA
AGTAATACTGAAGAATTTCTTTATGATATAGCTGGATGCAGTGGAACTTCACCGTGCAGAACAGAGAACTTGA
GTGTATTGAGAGATCAAAGAGAGAGTAGGCACGTCAAAAGTTTTGGTTTTACTCAGTGGTGGAGTAGACTCAAC
AGTTTGTACAGCTTTGCTAAATCGTGCTTTGAACCAAGAAACAAGTCATTGCTGTGCACATTGATAATGGCTTTAT
GAGAAAAACGAGAAAGCCAGTCTGTTGAAGAGGCCCTCAAAAAGCTTGGAAATTCAGGTCAAAGTGATAAATGCTGC
TCATTCTTTCTACAATGGAAACAACAACCTACCAATATCAGATGAAGATAGAACCCCAACGAGAAAGAAATTAGCAA
AACGTTAAATATGACCACAAGTCCTGAAGAGAAAAGAAAAATCATTGGGGATACCTTTTGTTAAGATTGCCAATGA
AGTAATTGGAGAAATGAACTTGAAACCAAGAGGAGGTTTTCTTGCCCAAGGTACTTTACGGCCTGATCTAATTGA
AAGTGCATCCCTTGTGCAAGTGGCAAAGCTGAAGTCAATCAAAACCCATCACAATGACACAGAGCTCATCAGAAA
GTTGAGAGAGAGGGGAAAAGTAATAGAACCCTCTGAAAGATTTTCATAAAGATGAAGTGAGAATTTTGGGCAGAGA
ACTTGGACTTCCAGAAGAGTTAGTTTCCAGGCATCCATTTCCAGGTCTGGCCTGGCAATCAGAGTAATATGTGC
TGAAGAACCTTATATTGTGAAGGACTTTCCTGAAACCAACAATATTTGAAAAATAGTAGCTGATTTTCTGCAAG
TGTTAAAAAGCCACATACCTTATTACAGAGAGTCAAGCCTGCACAACAGAAGAGGATCAGGAGAAGCTGATGCA
AATTACAGTCTGCATTCACTGAATGCCCTTCTTGCTGCCAATTAAGCTGTAGGTGTGACGGGTGACTGTCTGCTT
CTACAGTTACGTGTGTGGAATCTCCAGTAAAGATGAACCTGACTGGGAATCACTTATTTTCTGGCTAGGCTTAT
ACCTCGCATGTGTCAACAGTTAACAAGAGTTGTTTATATATTTGGCCCAACAGTTAAAGAACCTCCTACAGATGT
TACTCCACTTTCTTGACAACAGGGGTGCTCAGTACTTTACGCCAAGCTGATTTTGAGGCCCAATAACATTCTCAG
GGAGTCTGGGTATGCTGGGAAAAATCAGCCAGATGCCGGTGATTTTGACACCATTACATTTTGATCTGGGACCACCT
TCAAAAGCAGCCTTATGCCAGAGATCTGTGGTTATTCGAACCTTTATTACTAGTGACTTCATGACTGGTATACC
TGCAACACCTGGCAATGAGATCCCTGTAGAGGTGGTATTAAGATGGTCACTGAGATTAAAGAGATTCTCGTAT
TTCTCGAATTATGTATGACTTAAATCAAGCCCCAGGAACCTACTGAGTGGGAGTAATAAACCCTT

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FIGURE 1291

GACCCCTTTTCAACAACATGGCGCCGAAAGCGAAGAAGGAAGCTCCTGCCCTCCTAAAGCTGAAGCCAAAGCGAAG
GCTTTAAAGGCAAGAAGGCAGTGTGAAAGGTGTCCACAGCCACAAAAAGAAGATCCGCACGTCACCCACC
TTCCGGCGGGCCGAAGACACTGCGACTCCGGAGACAGCCAGATATCCTCGGAAGAGCGCTCCAGGAGAAACAAG
CTTGACCACTATGCTATCATCAAGTTTCGGCTGACCACTGAGTCTGCCATGAAGAAGATAGAAGACAACAACACA
CTTGTGTTCAATTGIGGATGTTAAAGCCAACAAGCACCAGATTAACAGGCTGTGAAGAAGCTCTATGACATTGAT
GTGGCCAAGGTCAACATCCTGATTTCGGCCTGATGGAGAGAAGAAGGCATATGTTTCGACTGGCTCCTGATTACGAT
GCTTTGGATGTTGCCAACAATAATGGGATCATCTAACTGAGTCCAGCTGCCAATTCTGAATATATATATATAT
ATATCTTTTACCAT

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FIGURE 1292A

GATGAAGAGGAAGAAATCAAAACAAGAAATTAACATGTTGAAGAAATATTCTCATCCCGGAATATTGCTACATAC
TATGGTGTCTTTTACAAAAGAACCACACAGGCATGGATGACCAACTTTGGTTGGTGATGGAGTTTGTGGTGCT
GGCTCTGTACCCGACCTGATCAAGAACACAAAAGGTAACAGCTTGAAGAGAGGAGTGGATTGCATACATCTCGCAGG
GAAATCTTACGGGGGCTGAGTCACTGCACCAGCATAAAGTGATTCATCGAGATATTAAAGGGCAAAATGCTTTG
CTGACTGAAATGCAAGATTAAACTAGTGGACTTTGGAGTTCAGTGCTCAGCTTGATCGAACAGTGGCGACGAGG
ATACTCTTCAATTGGAACCTCTTCTGGATGGCAGCAAGATTATTGCCTGTGATGAAAACCCAGATGCCACATAT
GATTCCAAGAGTGACTTTGTGGTCTTTGGGTATCACCGCCATTGAAATGGCAGAGGTTGCTCCCCCTCTCTGTGAC
ATGCACCCCATGAGAGCTCTCTTCCCTATCCCCGGGAACCCAGCGCTCGGCTGAAGTCTAAGAAGTGGTCAAAA
AAATTCACGTCAATTATTAGAGCTGCTTGGTAAAGAATCAGACGACGACAGCAACAGCAATATGATGAAG
CATCCATTTATACGAGCCAACCTAATGAGCGACAGGTCCGCATCAACTCAAGGCCATATTGATGAGAACAAAG
AAGAAGCGAGGAGAAAAGATGAGACAGAGTATGATACAGTGGAAAGTGAAGAGGAGGAGGAGATGACTCA
GGAGAGCCCGACTCCATCCTGAATCTGCCAGGGGAGTCGACGCTGCGGAGGGAGCTTCTGAGGCTGCAGCTGGCC
AACAAGAGGAGCTTCTGAGGCTTACGGAGGCAGCAGCTGGAGCAGCAGCGGGAGATGAGGAGCAACAAGCGGC
AGCTGTCTGGCCGAGCGTCAGAAGCGCATTCGAGGAGCAGAAAGAGCAGAGGCGCGGCTGGAGGAGCAACAAGGC
GAGAGAAGGAGCTCGGAAGCAGCAGGAGAGGAGCAGCGCCGCACTATGAGGAGCAGATGCGCCGGGAGGAGG
AGAGGAGCGCTGCGGAGCATGAACAGGAATACATCAGGCGACAGTTAGGAGGAGCAGAGACAGTTAGAGATCT
TGCAGCAGCAGCTACTGCATGAACAAAGCTCTACTTCTGGAATATAAGCGCAACAAATTTGGAAGAACAGAGACAAG
CAGAAAGACTGCAGAGGCAGCTAAAGCAAGAAAGAGACTACTTAGTTTCCCTTCAGCATCAGCGCAGGAGCAGAG
GGCCTGTGGAGAAGAACCTACTTACCATACAAAGAAGGAATGAGTCCCTAGTAGAAGCCAGCATGGGCCAAGG
AGGTAGAAGAACGCTCAGGCTCAACCGCAAGATTCCCTGCCATGCCTCACAAGGTTGCCAACAGGATATCTC
ACCCAACTCGCCCCAAGCTGGAGTCTTTCAGCATAGTGGAGTTCAAGCTTCGACACCCCTCGACACCCCTGCTCA
GACCAGTCGATCCCCAGATCCACATCTGTTAGCTGTAATAATCCCAGGAGCTGCCTTGACCGCTCCCAAGTCAG
TGCACGAGCAGCCCAAAAGGGCTCTCTGGGTTTCAGGAGGCTCTGAACGTGACCTCCCACCGCTGGAGATGC
CAGCCAGAACTCAGATCCCACTCGGAAATCTCTCTCCCCACTCGCATTTGAAAGTCTTGACCCGAAGCTCTT
GGTTACGACAGGAAGAAGACATTCACCAAAAGGTGCCCAAAGAACAACTTCTATATCCCCAGCATTAGCCAGAA
AGRAATCTCTTGGGAATGGTAGTCTCTGGGACCCAGACTAGGATCTCAACCCATCAGAGCAAGCAACCTCTATC
TCCGGAGAAGTGAAGCCATCTTGGAGAGCCCTTGCAGAGGACAGCAGTGGCAGTCTCCAGCTCCAGCACCC
CTAGCTCCCAGCCAGCTCCCAAGGAGGCTCCAGCCTGGATCACAAGCAGGTCAGTGAACGCACCCAGAGTTC
GAGCCAAACAGTAAGTCAGAAGGATCACTGTGCTCCCCATGAGCTCGCAAGGTGAACCAAGAAATCCAGGG
ACATTACCCGGCCAGCTGACCAAGCTAGCTACAAAAGAGCTATAGATGAGGATCTGACGGCATTCAGGCAAGAAC
TAAGAAAGCTCCGATTGAAGAAACAACCCGCCAATGAAGAAAGGTGACTGATTACTCTCTCCAGTGGAGAGT
CAGAAAGTAGCGAGGAAGAGGAGGAAGATGGAGAGCGAGACCCATGATGGGACAGTGGCTGTGACGCACATAC
CCAGACTGATACCAACAGGAGTCCAGGCAGCAACGAGCAGTACATGTGGGAATGGTGGGGAGCGATGGGCTGG
AGACCTTCTATGCGGAGAGCTCCAGCGGAGTATTTCAAGAGAGGAACCTTGATGATTAGAGAGAGCTGTGGAG
AGAAGAAGCGATCTGCCACAGTGACAGCAATGGCTTGTCTGGCCACATCAACCTCCCTGACCTGGTGAGCAGACA
GCCATTCTCCAGCTGGAACCCGACTGAGGAGTGGGCGCTCTCAACCCATCCAGAGAGTGGACTTGGGA
CTGAATATCCGATGGGAGCAGCAGCAACCAAGCTCTTCAACCCCTTTGGAGCCCAAGATATACAGAGCTCTC
CCACTGATGAAGTGAAGAGGATGAGGAATCATCAGCCGAGCTCTGTTTACTAGCGAACTCTTAGGCAAGAAC
AGGCCAAACTCAATGAAGAGCAAGAAAGATTTCGGTGGTAAATGTAAGCAACCAACTGACCTCATAGCGACA
CACCAGAAATCAGAAAATCAAGAAACGATTCAACTCAGAAATACCTTGTGCGAGCTCTGTGGGGGTGTAACCTTC
TGGTGGGAGCTGAAATGGCTGATGCTTTTGGACCGAAGTGGGCAAGGCAAGTCTATAATCTGATCAACCCGGA
GGCGATTTCCAGCAGTGGATGTGCTAGAGGAGCTGAATGTCTTGTGACAAATTCAGGAAGAGAAATAAGCTAC
GAGTTTACTATCTTTCATGGTTAAGAAACAGAAATACTACATATGACCCAGAAAGTAGAAAAGAACAGGCTGGA
TCACTGTGGGGAGCTTGGAGGCTGTATACATTAAAGTTGTAAATGAAGAGATCAAAATTTTGGTGATTG
CCTTAAAGAATGCTGTGAAAATATATGCTTGGGCTCTAAACCCTATCATAAATTCATGGCAATTAAGTCTTTTG
CAGATCTCCGACCAAGGCTCTGCTAGTTGATCTCAGGCTAGAAGAAGGTCAAGAGATTAAGAGTTTATTTGGTT
CACACACTGTTCCATGTAATGTTGATTTGATTCAGGAAACTCTTATGATATCTACATACAGCTCTCATATCAGG
GCAATATCAGCTCTATGCTATTGTCATCTTGCTTAAACAGATGGAATGGAAATGCTTGTGTTGCTATGAGGATG

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FIGURE 1292B

AGGGGGTGTATGTAAACACCTATGGCCGGATAACTAAGGATGTGGTGTCCAATGGGGAGAAATGCCACGTCGTG
TGGCCTACATTCAATCCAATCAGATAATGGGCTGGGGCGAGAAAGCTATTGAGATCCGGTCAGTGGAAACAGGAC
ATTTGGATGGAGTATTTATGCATAAGCGAGCTCAAAGGTTAAAGTTTTCTATGTGAAAGAAATGATAAGGTATTTT
TTGCATCCGTGCGATCTGGAGGAAGTAGCCAAGTGTITTTTCATGACCCTCAACAGAAATTCATGATGAAGTGGT
AACAGAAGAGCACTTGGCACTTATCTTCATGGCGTTATTTCTAATTTAAAAGAACATAACTCATGTGGACTTATG
CCAGTCTAGAGGCAGAAATCAGAAGGCTTGTTGAACATATCGCTTTCCTTTTTCCTCTCCCTCCGCCCTCCCA
GTACAGTCCATCTTTCAATGTTGCAGCCTGGTTGAGAAGGAGAGAAAAGGTGGCAGGAATTCGAGGATGCC
CAAGAATGCTGCCITGTCTGTGGACAAAGATGGACCATGTGCCCTTCGGAATTAGGGATAGAAACAAATATTGTG
TGCTCTTAACGATTAAGCTGTGTTATGGTGGGTTTTACGTTTTTACCTTTTTTCTTTACCCCTTTACTCTGCAA
GAATGGGGAAAGAAATGCATACTGCGAAAATGAGTCTTTTAAATTCGTCTGCCTACTAGTTTTAAGTATATGGTA
TGTTGTAAATTTCCAATGATGAGAGACAGCACAAATAAATGTACCTTATCTCCTTAGGCTGAAGGCCATAACTAC
ATAGTGGAGTAATTTAAGAACTCTCTTGCCTTCACCAACCCAAAGGTTGCTTTTTGATAGCAACTGGCTAATGA
ATTTTTAAAAGAGAGAAAAAATACTAGTTTTCCCTCTTTTGGGAAATAGATTTTTAAATGGCTAAACTACTAGC
CTTAAAACTACTAGTCTAATAAAATCAACTACCCTTTTGTGAATCTGACAGGCCACATTTTTATATGGCCCTTT
ACGAATGGAGTGTGTTGAACAGGATACTAACGCCATTGAGTTGAGCTGGCCTAGCGATGGAGGGACACTCTAAC
ACACTTTCCCTCAGCTATTATGCAACAGATCAGGGAAAAAGATGGGATGACAGATGGGGTCAGACAGAAAGAGC
TTCGGAACAAGCTTACATAGTCTTTTTTAAATGCACAAAGCCTCCAGCTAAGAGGTCACTTGGTTTGGGC
TTCATTAGGACTGAGACTTTGTTGAGTTCTTTCTGGGACTTGGAGAGTGGATGATATTCAGGCTCTGAACATTCC
CAGCGCTCTCCGAGGGTGCCACTTTCTCAAGATGAAAACCTGTGACTGAAAAAATTAATAATAAATGTTTCTGAG
CTGCCTGTGTTCTCCCTGTGTGGGTGAGAGAAGGGACTAGACTCCTAAGCCTGCCTCAGATACAAGAGGCATCAT
TGGCTCCAATTTTAGAGAACTTGAAAGCAAGGCTTTGGACAAAATTTGAGACCCTAATCACTTTTACCTTCTCTCC
AAATTACCAACATACGGTAAACAACATTGTGCGAGAAGTATGTATGTATTAGTTACAGTTGACTTGTGTCCTT
ATAAATCTTACTCAAATGATTGAACCTT

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FIGURE 1293

MPHKVANRISDPNLPFRSEFSISGVQPARTPMLRPVDPQIPHLVAVKSQGPALTASQSVHEQPTKGLSGFQEA
LNVTSHRVEMPRQNSDPTSENPPPLPTRIEKFDRSSWLRQEEDIPPVQPRTTISIPALARKNSPGNGSALGPRLG
SQPIRASNPDLRRTEPILESPLQRTSSGSSSSSTPSSQPSSQGGSPGSGAGSSERTVRANSKSEGSPVLPHE
PAKVKPEESRDITRSPASYYKKAIDEDLTALAKELRELRIEETNRPMKKVTDYSSSEESSESEEEEEDEGESE
HDGIVAVSDIPRLIPTGAPGSNEQYNVMVGTHGLETSHADSFSGSISREGTLMIRETSGEKKRSGHSDSNGFAG
HINLPDLVQQSHSPAGTPTGLGRVSTHSQEMDSGTEYMGSSSTKASFPTPFVDPVRYQTSPIDEDEDEESSAAA
LFTSELLRQEQAKLNEARKISVVNVNPTNIRPHSDTPEIRKYKKRFNSEILCAALWGNNLLVGTENGLMLLDRSG
QGVYVNLINRRRFQQMDVLEGLNVLTISGKKNKLRVYLLSWLRNRILHNDPEVEKKQGWITVGDLEGCIHYKV
KYERIKFLVIALKNAVEIYAWAPKPYHKFMAFKSFADLQHKPLLDVLTVEEGQRLKVFVGSHTGFHVIVIDVSGNS
YDIYIPSHIQGNITPHAIIVILPKTDGMEMLVCYDEGVYVNTYGRITKDVVLQWGEMPTSVAYIHSNQIMGWGEK
AIEIRSVETGHLDGVMHMKRAQRLKFLCERNDKVFFASVRSGGSSQVFFMTLNRNMMNN

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FIGURE 1294

GGGGGCAAAAAAAGAAGCAAGTTCGAAGTTCACCTCTTGATTGCACCCACCCTGTAGAATCATGGATGCTGCCA
ATTTTGAGCAGTTTTTGCAAGAAAGGATCAAAGTGAACGGAAAGCTGGGAACCTTGGTGGAGGGGIGGTGACCA
TCGAAAGGAGCAAGAGCAAGATCACCGTGACATCCGAGGTGCCCTTCTCCAAAAGGTATTTGAAATATCTACCA
AAAAATATTGAAGAAGAATAATCTACGTGACTGGTTGCGCGTAGITGCTAACAGCAAAGAGAGTTACGAATTAC
GTTACTTCCAGATTAAACCAGGACGAAGAAGAGGAGGAAGACGAGGATTAATTTTCATTTATCTGGAAAAATTTGT
ATGAGTTCTTGAATAAACTTGGGAACCAAAATGGTGGTTTATCCTTGTATCTCTGCAGTGTGGATTGAACAGAA
AATTGGAAATCATAGTCAAAGGGCTTCCCTTGGTTCGCCACTCATTATTTGTAACCTTGACTTCT

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FIGURE 1295

ATGAAGAGAGTGTGACGAGAGGTCGCCTCCAGAGGAGGTGCTGTGGAGACTGAGCGCATAGCACCCCTTAAATCC
TGGGACCAGGGCTTCTCCACGGGCTTGCTGAAGAAGGGAGAAAAAGAACAGCAAGAAGCGATTGAACACATTGAT
GAAGTACAAATGAAACAGACAGACTTAATGAACAAGCCAGTCCCCTTACAAAGAAACAGACAGATGATTTAGGT
GATAATGACGGTGTGTAAGATGAAGATATTTCGGGACAGTGGGGGTCCCAAACCAAGTGATGGTGTATATCCATGGT
GGCTCATATATGGAAGGTACTGGAATTTATATGATGGAAGTGTCTTGGCAAGTTATGGCAATGTGATCGTCATC
ACAGTCAACTATCGACTTGGAGTACTCGCTCTACATCCGAGTTATGATTGAGGAGCCACTGGGCAGGAAAATGTG
AGGACACAGAGGAAGCTGACTGAAGCAGGTAGACGAGAAGAGGAAACGGGTTGTGCGACGGCGGGGGTCGCTGCC
CGTCTGTCCGTCGGCTTCTCCAGCGGTAAAAGGAGAGCTGATGGAACGTGTAATCAAATCGAAGGTGAAGCCACC
CCAGTTAACCTCAGAGGCTGCCAAGCTGGAAGTTAAGTTTTCTGGTACATAATTATCTGTCAAACACTTAC
TACATGTCACGCCTAAGGTTGCCATGATGAGCCGACAGAGCTGGCCTTGGTACTTATGGAGCTCATTCCCAGT
GTGGATACAGACAGTGA

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FIGURE 1296

TATTTTGT CAGATGTGTGTAACCTCGATTAGATTGCATTATGACATTCTTGAAGACCGAGTTCATCAGGACTT
ATTGTTGACTACACAATCTGTTGTCTCAATGTGAGGAGAGITTACAGGAAATTTTAAATCTGAGAAGCAGTTGT
TCAAAATTGTAACCTGATTCCGAGCAGGAAATATCTCCATGGTGGAAAGGGTTAAAAATTGTATTCCGGAGATGGAA
CAGTTGAAACAAAGCTGAAACTCATTGAGAAATCCTTTGTTGAGGTATGTGTTTGGTTATCAGAAGAAATCTTAAC
ATCCAAGCAAAGGGTGTCCGTTCCAGCGGT CAGAAGATCACTCATGTGGTCTCTCCACCATTGATGGCTGGTCTC
CTGCGGTCCCTGCTTTACGGACAGGCTTTGCCAGGAGCCTGGTGAGGAAGAAAGAGAAATTCAGTTCCATAGTGAT
CCATTGTCTGCTATAAATGCCTGCTTCGAAGGTGACACTGTTATTGTTTGTCTCGCCATTATGTGGTACATGGC
ACTTTCTCCATTGCTGACTCCATTGAGTTGGAAGGATATGGCTACCAGATGACATTGTGATAGAAAAAGGGGGC
AAAGCGGACACTTTTGTGGACTGCATGGTGCTGATATTAAATCTCAGGCATAAAATTTGTT CAGCATGATGCT
GTAGAGGGAACTTTAATTGTTCCACCTGGTAAAGACTACGCTGGAAACTGTGTGCTGACGTGTGAGACGACCGGA
GTCACAGTGC GGACATCAGCAGAGTTTCTAATGAAGAACTCGGATTTATATGGCGCCAGGGTGTGTTATAGAA
ATCTACCTTGGGAGTCAGTGACCCCTGAGTGACAATGGGATCCATCACTGCAAGGAAGGGATCCTCATTAAAGGAC
TTCTTAGATGAACATTATGACATCCCAAGATATCCATGGTGAATAATATAATACATAATAATGAAGGTTATGGT
GTTGCTTTGGTGAAACCTACAATCTTCTCTGACCTGCAAGAAATGCTGAAGATGGAAGTGAAGAAATAAAGCG
CTTAAAAATT CAGACAAGTGGAGAGCCAGATGTGGCTGAAAGAGTGGATCTAGAAGAGCTGATTGAGTGTGCACT
GGTAAAAATGGAGCTTTGTGCAAGAACTGACCCTTCTGAGCAAGTCGAGGGAAATTTGTGAAATTTGAAATGAACTA
ATTGCTGCCTCCACACAGAAAGGCCAGATAAAGAAAGAAAGGTTGAGTGAAC TGGGGATCAGCAAGCTGATGAC
AACTTAAATGTCACAGGAGATGTTTGTGGGATTGTGGGGAACCAAGTTCAAAGTGGAA TGGGAAAGGTAGTTTTGGC
ACATTTCTTTTCTGACTACAGTGATGTAAGTAGATAGCAAAATACTGGATTTTGCACTGCTGCCCTAAGAATCA
CTGCTGCCATTGTAGTTTGTGTTGTTGTTATTTTATATTGATTATTGGGCTTGAGTGAAGGTAGATTTA
TTTCCATTGTCAGGTGTGTCACATAAAACACTCCCTCTTTATAAGAAAAATCATAAATGCATATAAAATAGAAAA
TATTTGGAGATTGCTTATCTGAAAGCTTGTCTTCTTATACATGTTTCTCTCATATTAAAGCCTGGTAGTAATC
TTTTAGTGTAATTACCTTTAGCACTTCAAAGACGAGGAAGTAAGGAAGGGAATGCAAGACTAGTGATATAAAATG
CAATAGGTGTCATATGTACAGCATTTCTTCTAGAGTTGCCCTTTTCATCCCAATTACAGTGAGCTGATTCCATC
CTGTATTTGCATAATACTTGTCTTAAAA TAAAGCCTTTATGATTGGGAATTTATCTGCCTAATCAGACTTATTA
TTGAGACGCTCAATGGGACGCATTTTTCTGTTGAGCTATGCACTGCTCAAAACAGCGATAGACAGCATAGGAGGTT
TGAAGCAGAAATGAAATGTGTTATT CAGAGCCAAATGTTGATATAGACATTTTCACTATTGCTGAATGGGAATG
ATTA AAAACAAAGGTATTTTTCGGGCCAGGCGGTGGCTCAGCGTTGTAATCGCAGCACTTTGGGAGGCTGAGGCAG
GAGGATCACTTGAGCCAGGAGTTCAAAGACTAGCTAGGCAACATAGTGAGACCTGTCTCTACTAAAAATAAAT
TTAAAAAAATAGCTGAGTGTGGTGGTGATGATGATAGTTCCAGCTACTCAGGAGGCTGAGGCTAGAGGATCC
TTGAGCCAGGAGGTTGAGGCTGCGAGTGAGGTGTGATTGCGCCACTGCATTCCAGCTTTGGGCGCAGAGCGGAGAC
CCAGTCTCAAAAAAAGATATTTTCTTACCCTGACAGTATTCTGATTATATTACTGACACAGTCAAA
ATGATTAACTGTACAACCTGTATCTGCTGGGTGTTCTTGTTATCATATTGTAACACAGCTTTAAAAATAATTATA
TTTTAAAAACTGTATGTGACATTAATGCTAATGATTAAAAATTAGATGATGATAAACAATA

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FIGURE 1297

GTAGCCATGGCGGCCATGAGTTTGTGCGGCGGGTTTCGGTTACTGCGGTGGCAGCTCTGTCTGGCGGGCCCCCTT
GGCACTCGCCTCGGATTTGGGGGCTTCCTCACTCGTGGCTTCCGAAGGCTGCTGCTCCTGTTGACACAGTGGGA
GACCATGGGAAAAGACTATTTGTATCAGACCTTCAGATTCTATGACAGGCGTTTTTGAAGTTATTGAGATTC
TACATTGCATTGACTGGGATTCAGTAGCAATTTTCATAACTCTGGTGAATGTATTCAATTGGTCAAGCTGAACTA
GCAGAAATCCAGAAGGCTATGTCCAGAACACTGGGAATATTATAAGCAATCCCATATCAAGATGGATTGCCCGT
AATTTCTATGATAGTCCTGAAAAGATATATGAAAAGAACAATGGCCGTCCCTCAGATTGAAGCTGAAAAGGCTGAA
TTACGGGTAAAGGAGCTGGAAAGTGCAGAAATTTGATGCATGTGAGAGGAGATGGACCCCTGGTATTACTATGAGACA
ATTGACAAGGAACCTTATTGATCATTCTCCGAAAGCAACTCCTGACAATTTAAGCCCTTTTTTCTCCAAATACAAAG
TATATTCTCTTTATTGGAAAATAAATTAATAATATATTCGTATTTTTTGCTCTCCGTGAAAAACAAAGAGCCCT
CTGACATTACTGTCTCTCAGTGTGGTTCAGATTGAGGCTTTTTGTTTGAGGAGTTTGGCTTCCAGTCCCCAAAGA
AGGTTTAAATGTACTAATAAAAACTGGAGAAATAGGAATTTGTGAACCCCTAAATTTGTAGCAACTTTGAAAGG
TTAGTGTTTATTTTACCTGACAAATGGAAGTTATAGAAGTCAATAATGTTAAGCACCAGTAATTATAGTATTTT
GTACAAATGCCTGTACTGTAGATGCTGTATTATTGAGGGGCAACTCAGGATTTTAAGTTCATAAAGTATTGAA
CCAACTCTAAATGTTAACTCCTTAATAAACAGATTCTCAGTAAACAAATTTTAAAGTTAAAAA

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FIGURE 1298

MAAMSLRRVSVTAVAALSGRPLGTRLGFGGFLTRGFPKAAAPVRHSGDHGKRLFVIRPSRFYDRFLKLLRFYI
ALTGIPVAIFITLVNFIGAELAEIPEGYVPEHWEYKHPISRWIARNFYDSPEKIYERTMAVLQIEAEKAEELR
VKELEVRKLMHVRGDGPWYYYETIDKELIDHSPKATPDN

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FIGURE 1299

GT TT T T G C C A G T T A T G C G A A A C A T G G C T G C G G C C G G T T G G C C C T T C T T T G T A G G A G A G T T T C A T C C G C C C T G A A
A T C T T C C C G A T C G T T A A T A A C T C C T C A G G T C C C T G C C T G C A C A G G G T T T T T T C T A G T T T G T T G C C T A A G A G T A C
A C C A A A T G T G A C A T C C T T T C A C C A A T A T A G A T T A C T T C A T A C C A C A T T G T C A A G G A A G G A C T A G A A G A T T T T T
T G A T G A C C C A A A A A C T G G G G C C A A G A A A A G T A A A A T C T G G A G C A G A C T G G A C C T T G C A G C A A C T A A G G A C A A
A A G T A A T G A A G A T T A C A C A A A C T T T G G T A T G T C T A C T G A A A A A G A A A C A T G C T T A A C C C T A G A G C A G G A
G G C C A A G C G G C A G A G A T T G C C A A T G C C A A G T C C A G A G C G G T T A G A T A A G G T A G A T A G A T T C C A T G G A T G C A T T A G A
T A A A G T T G T C C A G G A A A G A G A A G A T G C C C T A A G G C T T C T T C A G A C T G G T C A A G A A A G A G C T A G A C C T G G T G C T T G
G A G A A G A G A C A T C T T T G G A A G A A T C A T C T G G C A C A A G T T C A A G C A G T G G G T T A T A C C T T G G C A C C T A A A T A A A A G
A T A C A A T A G G A A A C G A T T C T T T G C C T T G C C T T A T G T G G A C C A T T T T C T C A G A C T G G A A C G T G A A A A C A G A G C C G
C A T C A A A G C A C G G A A G A A A A T T A G A G A A A A A A A G C A A A A A T T C T T T A A A A A A G T T T C C A C A T C T T G C T G A
A G C C C A A A A G T C A A G T C T T G T C T A A G A T G T C T G A A C T A T T A A A T T T A C C A T T T T G T T T T C T T G A A T A G T C T G T G
T A C A G G A G T A A A T A T G T T A A G T G G T T T A T A A A G A A A T T C T G T T T T A G T C A A G T G A C T T T A C T A A T C A G T T G T C
T A A G T G T G A A T A T G G C A T G C T A A T T A G C T A A T T T G T T A G A G C T A A T T T G C T T C A A A A A C A G G T A T A A A G T T C
A G A T G A G A T T C C C A C T T T A T A A A T T C T G A C A T T T A A G C A G C T T T A A A T G T C A C C T G C T A C C T T A G A G T G T G A A G
G T G A T G G T A A C T G C C A C A G C A A A G G C A A T A C C G T A G T T T T T G A A T T T G A A T A A T A G T T T T A C C T C T G T T G T T A A T
A G G C T A T G A A G A G A T G T G G G T A T T G C T G T T A A T A A A C G G A G G A C T T T G A T T C A A A A T A A T G A G A A A T A C A T T T A
G T C C T T A A A G T A G T A A T C A C A G T G C A C A A C A G T C C A A A A T A T A T T C T G G A A T G G C T A A T T T T A T T A A T T C T G
T A A G C C T A A G T A A A A A G C A T A G G C A G T A A C T T T T A C T A G T C A A T A A A A A C A G C A T T C T A C C A A T C C A C T G G T A A T
T A A T A C A C T A A A C A G A G T T G G A A A G C A T T T T A C T G A A A G C A A A A T A T T T A G A G A A A A T A G A C A T T T A T A C A A A A T
T A T A A A A T G C T T G T A A T A A G A A T A A G T G C A T T T C A A G G A A A G C A C A A A C T T A A T T T A T A G A G C C A G T T A A A G C T T
T A A A A A A T T T A A G T G G A A A T T G A A A T A T G C A A A A A T G T A T A A C A T T C T A C A A A A G A T G G T C A T T C T T T T C C T G A
G T A T A C T A A A G C T A T G A A A C G T A A G T G A C A A A A G G A A G G T A G A A G C T T G G G A A C T T C T T C T C A A G G C A C T T T C
T T T C T A C A C A C T G C T T C C C T C C T T C T C A T A T T C T T G C T T G A A A T C C A A C C A A C C A C A C T T G T G T G A C A C A T
G A C T G A C T C C T A A C A T T G T T T T C C T G A T A A C C C C T T T A C A T T G G A A G G G T C A A A T A A C C T T C T G G A A T C T T T A
G C C G C T C T G C A C C A A A A T C A C A A T T G T A G C C A T T G G G G A A T C A T A A T G A A C A G T T G G C A T C T G T G C A G C C A C T T
G T T C A T C A T A A G T T G A A T C T G A C A C T T G A A G T A C C G A A G C T T G A A A A T C C T G G A T A A C A A A T A C A C A T A A T
T G T G C C A A G A C C T C G T A A C C T G A G G C A A C T T C T C T T T C T T T C C A G T T T G C T G G A G A T C C C T C A C G A A C A G C T T
C T T T T G A T G C A A T C A T A T A T G G A G G A A C C A A T T C A A T A T T C A T T T C T T G G A A G A T T C T C T G C A C T G C A T A G T A T A
T A A A G T C T C C A G C A A G A G G G A T T C A C A A T G C C T T G T T G A A G G A C A T A G C C A T C G T G A C T G G A A T T G C A G T G G
T A T A G A T G G C T C C A C T G T C C A A A A T C A G C C C A G T A G A A C G A C C A T T A G C A A A T G C T G T C A A A A C T G C A G T T T T G C
A A A G G A A A G G C A G G G A T G T T G T A G T G T T C A A A C A T T A A C T T G T C A G T T T C T C T C T T T G C T C T A G T A T T C C
A C G G T G C C T C T G A C A T G A G A A C A G G A T G G A G A C T G G C T T C T G A T T T G A C A T G C A T T T G T A G G A T T A G A T C C A A A
T A G C T T G G A A A C T A T C C C A G C T T C A A C C A T C C C A T T T T T A G A G G T G A A A T G G C C T C C A T A T T C T C C C T C G G A A
C A C G A G A C A T A G A T A T C A T A T G A T A G G T G G G A C C G C C T T G T T G C C T T A T T C G C C A T C T A T T C C A A T A A T G
T G C T T C G G T A C T C T T T C T A C C A C C A T A C C A A T A G C T A G T A G A A A A T C C A C C T T G G G G C A G T C C T C A C C A G A C T
A A C A G C T C T C A C A G A T A A G A T C C A A T G T C A A A A A C A A G G G C T C C A A C T T C A C C T C C C C G T A C A C G C C C G C G
T C A T G G C T G C T G C C G G C G C G A C T C C T A C C T A A G G G C T A A C T G C C G A A G T G A C T G C A G T G G C C G C A C T G C G A G T
C T C G A G G A G C G A T A G C C C T G A C T C C T T A A C T T C C A C C G C C A C C A C C T C A G G C A A C A A A G C G G

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FIGURE 1300

CCGCTTTGTTGCTGAGGTGGGTGGCGGTGGAAGTTAAGGGAGTCAGGGGCTATCGCTCCTCGAGACTCGCAGTC
GCGGCCACTGCAGTCACTTCGCCAGTTAGCCCTTAGGGTAGGAGTCGCGCCGGCAGCAGCCATGAGCGGGCGCGGT
GTACGGGGGAGATGAAGTTGGAGCCCTTGTTTTGACATTGGATCCTATACTGTGAGAGCTGGTTATGCTGGTGA
GGACTGCCCAAGGTGGATTTTCTACAGCTATTGGTATGGTGGTAGAAAAGAGATGACGGAAGCACATTAATGGA
AATAGATGGCGATAAAGGCAACAAGGCGGTCCACCTACTACATAGATACTAATGCTCTGCGTGTTCGGAGGGA
GAATATGGAGGCCATTTCACCTCTAAAAAATGGGATGGTTGAAGACTGGGATAGTTTCCAAGCTATTTTGGATCA
TACCTACAAAAATGCATGTCAAATCAGAAGCCAGTCTCCATCCTGTTCTCATGTGAGAGGCCCGGTGGAATACTAG
AGCAAAAGAGAGAGAACTGACAGAGTTAATGTTTGAACACTACAACATCCCTGCCTTCCTTCCCTTGCAAAACTGC
AGTTTTGACAGCATTGTCTAATGGTCTGTTCTACTGGGCTGATTTTGGACAGTGGAGCCACTCATACCCTGCAAT
TCCAGTCCACGATGGCTATGTCTTCAACAAGGCATTGTGAAATCCCTCTTGCTGGAGACTTTATTACTATGCA
GTGCAGAGAACTCTTCCAAGAAATGAATATTGAATTGGTTCCTCCATATATGATTGCATCAAAAGAAGCTGTTGG
TGAAGGATCTCCAGCAAACTGGAAAAGAAAAGAGAAGTTGCCTCAGGTTACGAGGTCTTGGCACAATTATATGTG
TAATTTGTGTTATCCAGGATTTCAAGCTTCGGTACTTCAAGTGTGAGATTCAACTTATGATGAACAAGTGGCTGC
ACAGATGCCAACTGTTCAATTATGAATCCCCAATGGCTACAATTGTGATTTTGGTGCAGAGCGGCTAAAGATTCC
AGAAGGATTATTTGACCCCTTCCAATGTAAAGGGGTTATCAGGAAACACAATGTTAGGAGTCAGTCATGTTGTCC
CACAAAGTGTGGGATGTGTGATATTGACATCAGACAGGTCTCTATGGCAGTGTAAATAGTGGCAGGAGGAAAC
ACTAATACAGAGTTTTACTGACAGGTTGAATAGAGAGCTGTCTCAGAAAATCCTCCAAGTATCGGGTTGAAATT
GATTGCAATAATACACAGTGGAAACGAGGTTTAGCTCATGGATTGGCGGCTCCATTCTAGCCCTCTTTGGGTAC
CTTTCAACAGATGTGGATTTCCAAGCAAGAATATGAAGAAGGAGGGAAGCAGTGTGTAGAAAAGAAATGCCCTTG
AGAAAGAGTTCCCAAGCTTCTACCTTCCTTTTGTACCTTACGTTTTCATAGCTTTAGTATACTCAGGAAAAGAAAT
GACCATCTTTTGTAGAATGTTTATACATTTTGCATATTTCAATTCCACTTAAATTTTTAAAGCTTTAACTGG
CTCTATAAATTAAGTTTGTGCTTTCCTTGAATGCACATTATCTTATTACAAGCAATTTATAATTTTGTATAAAT
GTCTATTTTCCTATAATTTTGTCTTTCAGTAAATGCTTTCCAACCTCTGTTTAGTGTATTAATACCAGTGGAT
TGGTAGAAGTGCCTTTTATTGACTAGTAAAGTTACTGCCTATGCTTTTTTACCTTAGGCTTACAGAATTAATAA
AAATTAGCCATTCCAGAAATAT

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FIGURE 1301

MSGGVYGGDEVGALVFDIGSYTVRAGYAGEDCPKVDFFTAIMGVVERDDGSTLMEIDGDKKGQGGPTYIIDTNAL
RVFPRENMEAISPLKNGMVEDWDSFQAILDHTYKMHVKSEASLHPVLMSEAPWNTRAKREKLTLMFEHYNIPAFF
LCKTAVLTAFANGRSTGLILDSGATHTTAIPVHDGYVLQOGIVKSPLAGDFITMQCRELFQEMNIELVPPYMIAS
KEAVREGSPANWKRKEKLPQVTRSWHNYMCNCVIQDFQASVLQVSDSTYDEQVAAQMPTVHYEFPNGYNCDFGAE
RLKIPEGLFDP SNVKGLSGNTMLGVSHVVTTSVGMCDIDIRPGLYGSVIVAGGNTLIQSFTDLRLNRELSQKTPPS
MRLKLIANNTTVERRFSSWIGGSILASLGTFQQMWISKQEYEEGGKQCVERKCP

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FIGURE 1302A

AGAGTACGTTGTTTACAGATAAACTGGTACACTGACAGAAAATGAGATGCGAGTTTCGGGAATGTTCAATTAAATGG
CATGAAATACCAAGAAATTAATGGTAGACTTGTACCCGAAGGACCAACACAGAGCTCTTCAGAAAGGAAACTTATC
TTATCTTAGTAGTTTATCCCATCTTAACAACTTATCCCATCTTCAACACAGTTCCTCTTCAGAAACCGATCCTGA
AAATGAACTGAACATAATTAAGAACATGATCTCTTCTTAAAGCAGTCAGTCTCTGTGCACACTGTACAGATTAG
CAATGTTTCAAATGACTGCACCTGGTGATGGTCCCTGGCAATCCAACCTGGCACCATCGCAGTTGGAGTACTATGC
ATCTTCCACAGATGAAGAGGCTCTAGTAGAAGCTGCTGCAAGGATTGGTATTGTGTTTATGGCAATCTCGAAGA
AAGTATGGAGGTTAAAGCTCTTGGAAAAGTGGAAACGGTACAACTGCTTCATATTCTGGAATTTGATTAGATCG
TAGGAGAATTGAGTGTAATTGTTTCAGGCACCTTCAGGTGAGAAGTTATTATTGCTAAAGAGCTGAGTCATCAAT
TCTCCCTAAATGTATAGGTGGAGAAATAGAAAAACCAGAATTGATGTAGATGAATTTGCTTTGAAGGGCTAAG
AATCTGTGTATAGCATATAGAAAATTTACATCAAAAGAGTATGAGGAAATAGATAAAGCATATTTGAAGCCAG
GACTGCCCTTGACAGCAGCGGGAAGAGAAATGGCAGCTGTTTTCCAGTTTCATAGAGAAAGACCTGATATTACTTGG
AGCCACAGCAGTAGAAGACAGACTACAGATAAAGTTTCGAGAACTATTGAAGCATTGAGAATTTGCTGGTATCAA
AGTATGGGTACTTACTGGGGATAAACATGAACACAGCTGTTAGTGTGAGTTTATCATGTGGCCATTGCTTACAGAAC
CATGAACATCTTGAAGCTTATAAACACAGAAATCAGACAGCGAGTGTGCTGAACAAATTAGGCGAGCTTGGCAGAAG
AATTACAGAGGATCATGTGATTCAGCATGGGCTGGTAGTGGTAGGGACCGCTATCTCTTGCACTCAGGAGAGCA
TGAAAACATATTTATGGAAGTTTTCAGAAAATTTGTCAGCTGATTTGCTGTCTGATGGCTCCACTCAGAGAAAGC
AAAAGTAAATAGACTAATAAAATATCACTGAGAAACCTATAACATTTGGCTGTGGTGATGGTGCTAATGACGT
AAGCATGATACAAGAAGCCATGTTGGCATAGGAATCATGGGTAAAGAAGGAAGACAGGCTGCAAGAAACAGTGA
CTATGCAATAGCCAGATTGAAGTCTCCTCCAAAATGCTTTTTGTTTCATGGTCATTTTATATATAGAAATAGC
TACCCCTGTACAGTATTTTTTATAGAAGTGTGTGCTTTATCACACCCAGCTTTTTATATCAGTCTCTACTGTTT
GTTTTTCTCAGCAACATTTGATGACAGCGTGACCTGACTTTATACAATATTTGTTTTACTTCCCTACCTATTCT
GATATATAGTCTTTTGAAGACGATGTAGACCTCATGTGTTACAAAATAGGCCACCCCTTTATCGAGACATTAG
TAAAAACGGCTCTTAAGTATTAAGAACATTTCTTTATTTGGACCATCTGGGGCTTCAGTCATGCCCTTATTTCTT
TTTTGGATCCTATTATTAATAAGGGAAGATATACATCTCTGCTTGGAAATGGCCAGATGTTTGGAAACCTGGACATT
TGGCAGCTTTGGTCTTTCACAGTCACTGTTTATTACAGTCACAGTAAAGATGGCTCTGGAAACCTATTTTTGGACCTG
GATCAACCATCTCGTTACCTGGGAGCTATTATATTTTATTTTATTTTATTTTATTTATGAGGGGATTCTCTG
GCCATTTTGGGCTCCAGAAATATGTATTTTGTGTTTATTACAGTCCCTGTCAAGTGGTTCTGCTTGGTTGGCCAT
AATCCTCATGGTGTGTACATGCTATTTCTTGATATCATAAAGAGGCTCTTGACCGACACCTCTCACCTTACAAG
TACTGAAAAGGCAAGCTTACTGAAACAAATGCAGGTATCAAGTGCTTGGACTCCATGTGCTTTCCCGGAAGG
AGAAGCAGCGTGTGCATCTGTTGGAAGAAATGCTGGAACGAGTTATAGGAAGATGTAGTCCAACCCATCAGCAG
ATCATGGAGTGCATCGGATCTTTCTTATACCAACGACAGAGGATCTTTCACATCTTCCACAAATGGACTCATCTAC
TTGTTTAAAGGGGCAAGTAGTACTTTGTGGGAGCCGTTCACTTCTTCTTAAATTTTCAAGTGTGATCACCCCTGTTA
ATGGCCACACTAGCTCTGAATTTAATTTCCAAAATCTTTGTAGTAGTTCATACCCACTCAGAGTTAATATGGCAA
ACAAACAGAAAGCATTAGTACAGGCCCTTCCCAACCCCTTAAATTTGAATCTGAACATGTTTAAATTTGAGAAAT
AAGAGACATTTTTCATCTCTTTGTCTGGTTTGTCCCTTGTGCTTATGGGACTCCTAATGGCATTTCAGTCTGTTG
CTGAGGCCATTATATTTTAAATATAAATGTAGAAAAAGAGAGAAATCTTAGTAAAGAGTATTTTTAGTATTAGC
TTGATTATTGACTCTCTTATTTAAATCTGCTTCTGTAATTTATGCTGAAGTTTGCTTTGAGAACTCTATTTT
TATTAGAGTTATTTAAAGCTTTTTCATGGGAAAAGTAAATGTGAATAGTACGAGGAATTTTGGTCCCTCAGTGAGC
TGTGTTGTTAATCTAATGCAATCTGAGTTTACAGAGCAAAATAGGAGAAATCATTTCCAAACATTATTATCTG
CAGTATGGGAGTAAATTTATACCAATCTCTTAACTGACTGTAAACAGCCCTGTAAGTTAGCCATATAAATG
CAAGGGTATATCATATATACAAATCAGGAATCAGGTCCGTTACCGAACTTCAAATTTGATGTTTACTAATATTTT
TGTGACAGAGTAAAGACCTTACGTGGGTAATATGATACATATAGCATATTTAAATTTAATGTTCTTTATCA
TTGGATCTTTTGCATGCTTTAATCTGGTTAAACATTTTAAATTTGCTTTTTTCTCTTACCTTGAAGGCTCTGTG
TATAGTATTTCTGACATCGTTGACAGTTTAACTATATCAATAAAAGTTTGGACAGATTATTAATTTAGCAAA
TATGTTTAAATATACAAATCAGAATAGTATGGGAATTTAAATGAATACAAAAGAGAGCCCTCTTTCTGCAGCCG
AATCTAGACATGCTCTTCCCTTTCTATAAGCTAGATTTTGAATAAAGGGTTTCAGTTAATATCTCTTATTTTCAGG
TTATGTCATCTCACTTATAGCAAACTACCACAAATCAGTGAGTCTGCCAGTGTCCGATACAGGCAATTTTCA
GGTGTGGCTGTGGAATGTAAAAATGCTCAACTTGTATCAGGTAAATGTTAGCAATAAAATTAATGCTAAGAAATGAT

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FIGURE 1302B

TAATCGGGTACATGTTACTGTAACTTAACCTATTGCACCTTCAAAACCTAACTCCATCCTGAATTTATCAAGTAGT
TCAGTATTGTCAATTTGTTTTTGTATTTGAAAAGTAATGTTGCTTTAAGATTTAGAAGTGATTATTAGCTTGGAG
AATCTATTACCCAGCTCTAAGCAAATAATGATTGTATACATATTAAGATAATGGTTAAATGCGGTTTTACCAAGTT
TTCCCTTGAAAATGTAATCCCTTTATGGAGATTTATTGTGCAGCCCTAAGCTTCCTTCCCAITTCATGAATATAA
GGCTTCTAGAATTGGACTGGCAGGGGAAAGAATGGTAGAGACAGAAATTAAGACTTTATCCCTGTTTGTCTGTAA
ACTATTATTTTCTTGCTAATGTAACATTTGTCTGTTCCAGTGATGTAAGGATATTAAAGTTATTAAAGCTAAATATT
AATTTTCAAAAATAGTCCTTCTTTAACTTAGATATTTTCATAGCTGGATTAGGAAGATCTGTTATTCTGGGAAGTA
CTAAAAGAATAATACAACGTACAATGTCTGCATTCACTAATTCATGTTCCAGAAGAGGAAATAATGAAGATATA
CTCAGTAGAGTACTAGTGGGAGGATATGGAATTTGCTCATAAAATCTCTTATAAAACGTGCATATAACAAAAT
GACACCCAGTAGGCCTGCATTACATTTACATGACCGTGTATTTTGGCCATCAATAAACTGAGTACTGCACCCAG
ACAAAGACTCCAAAGTCATAAAATAGCCATGACCAACTGCAGCAAGACAGGAGGTCAGCTCGCCTATAATGGTG
CTTAAAGTGTGATTGATGTAATTTTCTGTACTCACCATTGAAAGTTAGTTAAGGAGAAGCTTTATTTTTTAAAAA
AAGTAAATGGCAACCACTAGTGTGCTCATCTCGAACTGTTACTCCAATCCAATCCGTTTTTAAAGCAAAATTAT
CTTGTGATTTTAAAGAAAAGATTTTCTATTTTAAAGAAAGTAACAATGCAGCTGCGAAGCTTTCAGTAGTTTT
CTAGTGCTATATTATCCTGTAAAACCTTACTACGTAAACAGTAATCACAAGGAAAGTGTCCTCTTGCATATT
TCTTTAAATCTCTTTCTTTGGAAAGTATGATGTTGATAATTAACTTACCCTTATCTGCCAAAACAGCAGCAAAAT
GCTAAATACGTTATTGCTAATCAGTGGTCTCAAATCGATTTGCCCTCCCTTTGCCCTCGTCTGAGGGCTGTAAAGCT
GAAGATAGTGGCAAGCAACAGTCAGTTTCCAAAATTTGCCCTCAGCTGCTTTTAAAGTACTCAGCACTTGCCTC
AGCTTCAGCAGGCGTAGGCTCACCTTGGGCGGAGCAAAGTATGGGCCAGGGAGAAGTACAGCTACGAAGACCTGC
TGTCGAGTTGAGAAAAGGGGAGAAATTTATGGTCTGAATTTTCTAACTGTCTCTTTCTTGGGTCTAAAGCTCATA
ATACACAAAGGCTTCCAGACCTGAGCCACACCCAGGCCCTATCTGAAACAGGAGACTAAACAGAGGCAATCAAC
CCTAGGAAATACTTGCATTTCTGCCCTACGGTTAGTACCAGGACTGAGGTCAITTTCTACTGGAAAGATTGTGAGA
TTGAACCTTATCGATCGCTTGAGACTCCTAATAGGCAGGAGTCAAGGCCACTAGAAAATTGACAGTTTAAGAGCCA
AAAGTTTTTAAATATGCTACTCTGAAAAATCTCGTGAAGCGTGTAGGAAAAGGGGAATCTTCCATGTTGGTGT
TTTTCTGTAAAGATCAGTTTGGGGTATGATATAAGCAGGTATTAATAAAAATAACACACCAAGAGTTACGTAA
AACA TGT TTTTAAATTTTGGTCCCACGTACAGACATTTTATTTCTATTTTGAATGAGTTATCTATTTTCATA
AAAGTAAACACTATTAAAGTGCTGTTTATGTGAAATAAATGGAATGTTGTTCCCTATAAAAAATAGATCATAAC
TCATGATATGTTTGAATCATGGTAATTTAGATTTTTATGAGGAATGAGTATCTGGAATATTGTAGCAATACTT
GGTTTTAAATTTTGGACCTGAGACACTGTGGCTGTCTAATGTAATCCTTAAAAAATCTCTGCAATGTGCAGTAA
TGTAGTATATTATTGTACAGCTACTCATAATTTTTTAAAGTTTATGAAGTTATATTATCAAAATAAAACCTTTCC
TATA T

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FIGURE 1303

MQFRECSINGMKYQEINGRLVPEGPTPOSSEGNLSYLSSLSHLNNLSHLTSSSFRTSPENETELIKEHDLFFKA
VSLCHTVQISNVQTDCTGDGPWQSNLAPSQLEYAYSSPDEKALVEAAARIGIVFIGNSEETMEVKTLGKLERYKL
LHILEFDSRRRMSVIVQAPSGEKLLFAKGAESSILPKCIGGEIEKTRIHVDEFALKGLRTLCLAIYRKFTSKEYE
EIDKRIFEARIALQOREEKLAAVFQFIEKDILLGATAVEDRLQDKVRETIEALRMAGIKVWVLTGDKHETAVSV
SLSCGHFHRTMNILELINQKSDSECAEQLRQLARRITEDHVIQHGLVVDGTSLSLALREHEKLFMEVCRNCSAVL
CCRMAPLQKAKVIRLIKISPEKPITLAVGDGANDVSMIQEAHVIGIMGKEGRQAARNSDYAIARFKFLSKLLFV
HGHHFYIRIATLVQYFFYKKNVCFITPQFLYQFYCLFSQQTLYDSVYLTLYNICFTSLPILIIYSLLEQHVDPHVLQ
NKPTLYRDISKNRLLSIKTFLYWTILGFSHAFIFFFGSYLLIGKDTSLGNGQMFGNWTFTGLVFTVMVITVTVK
MALETHFWTWINHLVTWGSIIIFYFVFSLFYGGILWPFGLGSQNMYPVFVIQLLSSGSAWFIIILMVVTCFLDIIKK
VFDRHLHPTSTEKAQLTETNAGIKCLDSMCCFPGEAACASVGRMLERVIGRCSPTHISRWSASDPFYTNDRSI
LTLSTMDSSC

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FIGURE 1304

TTTAGCAGTCTGTGATGATCAGCAAAAAAGCACATAAAGTAAAAATTAGTTGACCATGCTAAATCAATTCIGGA
ATTTTTTTTTATTTGGGCACTTTCTAGAACTTTTACATTTGAAAGTACATGATGAGTATTAGTAACGATGACTTA
TGTATAATCAGAATCTTTATGACAAATTTAGTTTTACAAGGTCAGAGAGATGAGTTTGCATAAACCAGCTGTGAT
ACCTCAGTTGGAAGGGAATTCAAAGTATGCTTTGTAGAACAGAAAAGTATAGTTTTTTTTCATGAACCTTTAA
TCATTTTCTGTTTTTCTCTATGTGAGTCAGCTACAAAAGTGGTCTAATTTTACAACAGTAGAACTTCTCTCT
TTCTACTGTAATCTTTCCCACTGACTTTACTGCACAGGTATGAAATACTAGTGTATTGGATCTTCAGTAACCTTTT
TATTTCTAGATGATTGAAATATAGGTATTACTCCATTTAAACCAGGTGATAGATGATGTAATACTCAGGGA
GGGTATTAACCTGTGTTACTTTTGCTCGTTTGGGGTGTAAGTGCCATGACTGAATAATCTTCAATTCATGATTCTA
GAGTAAGTTTAAATTTGGAAAAAGGGGCTTCACACATGCTGGTGGTTGAACATTGATCTTTTATACTTAAAAAGA
TGAAATGTTTTGTGGACTGATACATTTATCTTACTGAATATGAATTTGTTATGATATCTACTGTCAAATAGC
CTTTTTGAAACTCAGGAAAGACAAAGGTTCAATTTACACCACTTTTGCTCAAAGCAACAGGTATTTTTTTTTT
CTCCTGTTGCTGGATATGSCAATAGATTTTTTAAATTGCTGTGAGAACCCATATATGAAAGAGAGGAGTTGAA
TTGTGTGTGCCCTTTATGCTTGAGATTTATATGTGGAAGACGACATCTACTTCAAACGTATTTTTTTTCGTT
TTTTTTTTTTTTTGGGGAAGGGGGGAGAACGGGGTCTTGCTCTGTGCGCCAGGCTGGAGTCAGTGGCGCATCT
CAGCTGACGCAACCTCCACCTCCCGGGTCAAGGGATTCTGCCTCAGCCTCCCGAGTAGCTGAGACCACAGGTG
CGTGCCACCACACCGGCTAATTTTTTTTGATTTTTTAGTAGAGACGGGGTTAGTAGAGACGGATCACTCCTGAC
CACGTGATCCCGCCACCTCGGCCCTCCAAAGTGCTGGGATTACAGCGGTGAGCCACCACCCCGGCTGTATTT
CAGAGAGGAGAGCTTGGTGTTTTTGTGGTGCCAAAGTGAAGATAATGTCCTTTGAGGCTTCCATGAGCTGCC
TTTATTTTAGTAAACTCAAGACACCACTTAACCTCAACAGAGTTTGGCCTTATTAGAATTTGTTGTGACTCTTA
TTGAAAGCCAGGTTTACATCACCTCACCCCATTTCTTTTTAGTTAAATAAATTTACCATGCCAAGTAACAGGA
ATGAGCAAAATTTGGTTAGCTTTTAAGGCAGTAGGTTTGACTAGCTATCATTTATGTACATCTAATGCTAG
GCACCAGAAACCATTGTAGCCAGGAGTGTAATGAATAATTCAGAGACACTTATAGACATTTTTTATGTTTTAT
ATGAACATTTTACATTTGTGTGATTGCTTTAGATATTAATTTTCTAGTGCTGATAAAAACAGCAACATTCTA
ACTTATTTTATATATTGTTCCAAAGAAAAGAATTTGTTTTAATGGTTTCAAATAACGCACTGAAATTTGTTTTA
TGTGCCCTAAGTCTCTAGTGCTATTTCAACTTTTTTCAACTCAAAATGAAGCTTACCTTAGATAAGGTTTCATA
TTTGTTTCCCTATAGAGTAAATAAACTTCCCTTCTTAAATTTGTAATAAGCACCAACGTGTGGTTGCTTGGCAG
AATGAGAATGTTAAGGGAATTGTTGGAGTTTGGAGTTTCATTATATTTTTTGTTTTTTTTTTGTATACCTAG
GTGCTTTTTTAAATATTACAGACAAATATCTATCTTACATTGATTAAACCCGTGTAATTTCAATTTGCACTATCTAC
ATCGAATGTCAAAAAGTATACCTTATTTTGTTCATACCTTATGTACAAATTTTTTCCCTCTCAGGCTTTTTCAT
TTACCTTTTGAAGAAAGCACTTACTCTCCCTTCCCTATCACCCCTCCCCCAAGGTTCTCTTATTTAAATTTTTTA
TTGAGAGTTGTTGGAGCTCTAAGACAATAACAATTTAGAGTTGAACAAAAGTATAATCTGCTTTACACATAGTAT
AGACCTAAGGTCATTTGCTTTTCAATTTAGAGGCTCCAGAGCTTTCATAGTGGAAGAAATGCTTTGTATTTAATGT
TCTTAGTTAAGTTGATAGCAGCTGAATACTTACTTACATGTTTTGTTTAAATATACTTCTTGATAGTTTAAATTT
TTAAAAGTTGTATCTAATAAAATGCTTTTAAACCATTATTACTTGACTATATGGTTGATTAATTTTGTTTACG

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FIGURE 1305

MYLYCQIAFLKLRKDKGSITPLLSISKPGIFFFSCCLDMAIDFLNCCENPYMKREELNCVCLLCLEIYMMKRRHL
LQTVFFSFFFFGEGGRTGSCSVAQAGVQWRDLS

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FIGURE 1306

GTCTGGAATCAAGCGAACCATCAAAGAAACCGACCCTGATTACGAGGATGTATCTGTGCCCTTCCAAATAAGCG
GCATAAAGCAATTGAGAATTCAGCTCGAGATGCTGCTGTGCAGAAGATTGAGACTATTATCAAAGAACAGTTTGC
TCTTGAATGAAGAATAAGGAACATGAAATTGAAGTCATTGACCAGCGACTGATTGAAGCAAGAAGGATGATGGA
TAAACTGCGTGCCGTCATTGTAGCAAACTACTATGCTTCTGCAGGTCTTCTAAAAGTTTCTGAGGGATCAAAGAC
ATGTGATACGATGGTTTTTAATCATCCTGCTATCAAGAAATTTTGGAAATCACCATCTAGGTCATCATCTCCTGC
CAATCAGAGAGCAGAAACACCATCAGCCAATCATTGAGAAAGTGATTCTTTATCTCAGCACAAATGACTTCTTATC
TGACAAAGATAATAACAGCAATATGGATATAGAGGAAAGACTCTCAAACAACATGGAGCAGAGACCAGCCGAAA
TACTGGAAGGGATACTTCTAGAATTA CTGGCTCCATAAAACAGAACAGCGGAATGCTGATCTCACAGATGAGAC
TTCACGACTTTTTGTAAGAAAAACAATAGTAGTGGGCAATGTGTCCAAGTATATACCTCCGGATAAGAGGGAAGA
AAAATGACCAGTCAACTCATAAGTGGATGGTATATGTCCGAGGGTCCCGTAGAGAACCCAGCATTAACTATTGT
CAAGAAGGTTTGGTTCTTCCTTCATCCTAGCTATAAACCAAATGACCTTGTGGAAGTTAGAGAGCCTCCTTTTCA
CCTGACCAGAAGAGGCTGGG GTGAGTTTCCCGTCAGAGTTCAGTTTCAATTTTAAAGACAGCCAGCTCAAACCAT
CAGCGTAAACACATCTGGAGGGGTGCAGACGATCCTGATGCCTGTGAATAAAGTGGTTCAGTCATTTTCTACCAG
CAAGCCACCTGCCATTCTGCCTGTAGCTGCCCACTCCAGTTGTCCCAAGCTCTGCTCCAGCAGCTGTTGCAAA
AGTGAAGACTGAACCAGAAACACCTGGACCGAGTTGCCTCTCTCAGGAGGGTCAGACAGCAGTGAAAACAGAA
AAGTTCTGAGCTGGGAACTATGTCAATTAAGATAGACCAATTAGAACTATCCAGAACTCCTAACTTAGTAAAG
AAGATTCCATTAACTACTGCAAAAAGTGAAGATGCCAGCTGCTTTTCTGCAAAAGTCTGTGGAGCAGTACTATGGC
TGGAACATTGGAAAAAGGAGAGCCGCTGAGTGGCAAAGCAATGCAATGCGAAAAGTCTTACAAAGAACTCTG
GAGAAGAATCCGAGATTTACCACCTGACTCCCTCAAACCAAGCACATGCCTCACTGGTGCCGCTGTCTATGGC
TACACCCCAACCGGACCTGAGAGCCTGAGGAATGACGGGGAATCCATCGAGGACGTGCTGACCCAGATCGACAG
GAGCCGAGTGCCCATCACTATTCTCCTCTGCTGACAACCTCTGCCGAAACTGGAGGACCTGCAACAGTTCAG
CCCTGGTGACAGAGGAGACCCGCTCRAAAATTGATTGATCAATTACGACTCTGAGGGCTGCAAGTACAGAAGG
AATCTATTCTCAGCAGGGCATAGGGCAGCACTGGCTTAACAGTTTAGTATATAAGGCTCAAATAGTCTATACCT
GAATCTGTATAAGCAAGGTCGATAGGGAAAGTGATAGATTGCTTCAGCAAAGTGAATCTGTGAGATCTCCAGGACA
GAGGGAGAAAGATCTGATCAAATGAGAACAGATTGGTTATTGCAGGTATCACAGCCTAAAGAAATTTATCTTTT
GCAAAAGAAATATTAAATGATTAGCAGTCTCCAGCTGTGTTATGTTTCAAACGTGTATCATATGTGTATAT
TGTTGAACAAATTTGCTACAATAAATCTTTTGGTATTGT

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FIGURE 1307

MKNKEHEIEVIDQRLIEARRMMDKLRACIVANYYASAGLLKVSEGSKTCDTMVFNHPAIKKFLESFSRSSSPANQ
RAETPSANHSESDSLSQHNDFLSDKDNNNSNMDIEERLSNNMEQRP SRNTGRDTSRIIGSHKTEQRNADLTDETSR
LFVKKTI VVGNVSKYIPPDKREENDQSTHKWMVYVRGSRREPS INHFVKVWNFFLHPSYKPNDLVEVREPPFHLT
RRGWGEFPVRVQVHFKDSQLKPLSVNTSGGVQTI LMPVNVVQSFSSTKPPAILPVAAPTVPVPSSAPAAVAVKV
TEPETPGPSCLSQEGQTA VKTEESSELGNYVIKIDHLETIQQLT

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FIGURE 1308

ATGTCTAGAGCCCTTGATGTCCTGCAAAATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAGCAGGAACCCACTTA
GGTGGTACCAACCTTGACTTCCAAATGGACAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGA
GCCACTCAAATTGTTGGCCGCTTCACTCCTGGAACTTCACTAGCCAGACCCAGGCAGCCTTCAGGGAGCCACGG
CTTCTAGTGGTTACTGATCCCAGGGCTGACCACCAGCCTCTCAGAGAGACATCTTATGTTAACCTACCTACCATT
GCTCTATGTCACACAGATTTTCCTCTGCGCTATGTGGACATTGCCATCACATGCAACAACAAGGGAGCTCCCTCA
GTGGGTCGAGCTGGTGGATGCTGGCCCTGGAAGTTCTGCGCGTGTGTGGCACCATTTCCTTCGAACACCCATGG
GAGGTGATGCCTGATCTCTACTTCTACAGAGATCCTGAAGAGATTGGAAAAGAGGAGCAGGTTGCTGCTGAAAAG
ACTGTGACCAAGGAGGAATTTCAAGGGCAAATGGACTGCTCCAGCTCCTGAGTTACCCGCTATTCAGCCTGAGGTT
GGAGACTGGTCTGATGGTGTACAGGTGCCCTCTGTGCCATTTCATCAGGTCCCTACTGAAGACTGGAGTGTCTAG
CCTGCCACAGAAGACTGGTCTGCAGCTCCCACCTGCTCAGGCCACTGAATGGGTAGAAAACAACCCTGAATGGTCT
TAA

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FIGURE 1309

MSRALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMDNTGQRAVLKFAAATGATQIVGRFTP GTFTSQTQAAFREPR
LLVVTDPRADHQPLTETSYVNLPTIALCHTDFFPLRYVDIAITCNNKGAPSVGPSWWMLALEVLRVCGTISLEHPW
EVMFDLYFYRDP EEEIGKEEQVAAEKTVTKEEFQGKWTAPAPEFTAIQPEVGDWSDGVQVPSVPIHQVPTEDWSAQ
PATEDWSAAPT AQATEWVETTEWS

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[illegible]

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FIGURE 1311

MAAPVVAPPFVVVSRANKRSGAGPGGSGGGGARGAEEEEPPPLQAVLVADSFDRRFFPISKDQPRVLLPLANVAL
IDYTLEFLTATGVQETFFVFCWKAAAIKEHLLKSKWCRPTSLNVVRIITSELYRSLGDVLRDVKALVRSDFL
VYGDVISNINITRALEEHLRRLKLEKNVSVMTIMIFKESSPSHPTRCHEDNVVVAVDSTTNRVLHFQKTQGLRRFA
FPLSLFQGSSDGVEVRYDLLDCHISICSPQVAQLFTDNFDYQTRDDFVRGLLVNEEILGNQIHHMHTAKEYGARV
SNLHMYSAVCADVIRRWVYPLTPEANFTDSTTQSCTHSRHNIYRGPEVSLGHGSILEENVLLGSGTIVIGSNCFIT
NSVIGPGCHIGDNVVLDDQTYLWQGVVVAAGAIHQSLLCDNAEVKERVTLKPRSVLTSQVVVGNITLPEGSVIS
LHPPDAEEDDDGEFSDDSGADQEKDKVKMKGYNPAEVGAAGKGYLWKAAGMNEEEELQQNLWGLKINMEES
ESESEQSMDSSEPDSSRGSPQMDDIKVFQNEVLGTLQRGKEENISCDNLVLEINSLKYAYNVSLKEVMQVLSHV
LEFFLQQMDSPLDSSRYCALLPLLKAWSPVFRNYIKRAADHLEALAAIEDFFLEHEALGISMAKVLMAFYQLEI
LAEETILSWFSQRDITDKGQQLRKNQQLQRFIQWLKEAEEESSEDD

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FIGURE 1312

ATGGCGGCCCTGTAGTGGCGCCGCTGGTGTGGTGGTTAGTCGGGCTAACAAAGCGCAGCGGCGCGGGGCCGGGA
GGCAGCGGTGGCGGGGAGCCAGAGGGGCGGAGGAGGAACGCGCGCCGCCCTACAAGCAGTTCTGGTGGCCGAT
AGCTTCGATCGCCGCTTCTTCCCCATCTCCAAGGACCAGCCTCGGGTCCTCTTGCCCCGGCCAATGTGGCATT
ATTGACTACACTCTGGAATTCCTGACTGCCACAGGTGTACAGGAAACATTTGTCCTTTGTGCTGGAAAGCTGCT
CAAATCAAAGAACATTTACTGTAAGGCCCTGCAACTTTTCTTCCATGTTTCGCCATCTTTTCCAGTTTTCAT
GGATGAATGTAACTAAGGGGAAATGTGAGAGGGGAAAAATGTGTCTACTTAGATGTCATTGTAAGTTCTAAGGGT
ATTTTCTACACTTATCAGGAGGTGAGCAGCTGAAACTTTGTAICTGTCTGCTTGGGTTTCTGTGACAAAGATT
AAAGAATAAACTTGGGTTTTTCTGAATCTC

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FIGURE 1313A

CAAGCGACACAATGAACACGCTTCTCAGCCCCGCCAGCAGCTTCTACCTAGCCGGGCCAGCCCCGAGCAGT
GCAGCCTCCCGAGTGCAGAGTGCAGCCTGCCCCGCCCTGGCCAGCTGCCCCATGTCTACCTGTGGATCCCAA
GTAATGAGTCCCTTCCAGATCTCTACCCAGCCTCAGAGGGGCCCTACTACATCCTTGGACAGGGCGCTTCC
ACATACGTTGTGCCGACACAGCAGTACCCTGTGCAGCCAGGAGCCCCAGGCTTCTATCCAGGTGCAGGCCCTACA
GAATTTGGGACCTACGCTGGCGCTTACTATCCAGCCCCAAGGGGTGCAGCAGTTTCCCACTGGCGTGGCCCCACC
CCAGTTTGTGATGAACCGACCCGACGATTGTCTCCCAAGAGGGAGGCTAAGACGATCCGAATTCGAGATCCAAAC
CAAGGAGGAAAGGATATCACAGAGGAGATCATGTCTGGGGCCCGCACTGCCTCCACACCCACCCCTCCCCAGACG
GGAGGCGCTTGGAGCCTCAAGCTAATGGGGAGACGCCCCAGGTGTCTGTCAATTGTCCGGCCAGATGACCGGTCA
CAGGGAGCAATCATTGCTGACCGGGCAGGGCTGCCTGGGCCAGAGCATAGCCCTTCAGAAATCCAGCCTTCTGTG
CCTTCTCCGACCCCATCACCATCCCCAGTCTTGAACCGGGGTCTGAGCCTAATCTCGCAGTCTCTCTATTCTCT
GGGACACTATGACAACTATACAAATGTCTGTAGAAGAATCAACCCCATCTCCCGTGAACTGGGAGCCATAT
CGCCTCTCTCCAGAACCCACTCTCTCGCCGAACCCATCTGGAAGTAGAAGTGACACTAGCAAAACCGGTTC
GAACTCTGAGTTTCTCCAGTCTCTCCAGGCTCCACCCCTTTGGCATCTCACACAGTGGAAATTCATGAGCCT
AATGGCATGGTCCCATTCTGAAGATCTGGAACAGAGGTGGAGTCAAGCCAGAGCTTGCTCTCTCCCCAGCTTGC
CCTTCCGAATCCCCGTGTGCCATTGTCTCCAATCTGCCAATCTGAGGAATGCTCAACGGAGCCCCCTGCCACCA
GCTGTGGACTTAAGCCAGCTAGTGAGCCAGAGGACAGGCCAAGGAGGTGACAGCATCAATGGCGCCCCCACC
ATCCCCCTGTCTACTCCAGCTACGGCTCTTTCAGCTACTTCCCAAGCTCAGGAGGAGAAATGGAAGAGAAGAA
GAAGAGGAAGAGGAGAAGCAGGAAGCAGGAGAAGCTGAGAGTGAGAAAGGAGAGAGAACTGCTCCCCCA
GAGAGTACCCCTATTCCAGCCTTGTCTCAGAATTTGGAGGCAGCAGCCACTCAAGTGGCAGTATCTGTG
CCAAAGAGGAGACGGAAATTAAGGAGCTAAATAAGAAGGAGGCTGTTGGAGACCTTCTGGATGCCTTCAAGGAG
GCGAAGCCGGAGCTACCGAGGTGCAAAATCAGCCTCTCTGCAGGCAAGCAATCCAGGCCAGAGCTTCAGGGCGAGT
GGTGTGCCCCACGCTCTGAGGAAGCAGATGAGACCTGGGACTCAAGGAAGAGACAAATTCACATGCTGGAAC
ATCCAGCCCGGGGAACAGAATATGAATATAAGTCAGATCAGTGGAGCCTCTAAACCTAGAGGAGGAAAAACGT
TAGCAGCGTGAGTCTCTGCTGTGGTTTTCAGTTTCTTCCAGTATGCAGAGCCGAGAGGATTCGCACATATC
AGTGACGTGGTGTCTGGACAAAGGCCATAAAACACCACTGCGGCCACTGGATCCCACTAGACATCAAGGCATAAAT
TGTGGCCAGACTTCACTCCATCCTTTGCCAACCTTGGCCGGACAACTCTAGTACCCTGGGCCCCCAAGGGGT
GGGCCAGGTGGGAGCTGCCCGTGGCGGGCTGGCTTGGGACCCCGCGCTCTAGCAGGGACCCCGAAAGAA
CCACGCAAGATCATTGCCACAGGTGTAATGACCGAAGATATAAACTGAACAAAGCAGAGAAAGCCTGGAACCC
AGCAGCAAGCGGACCGCGCTGATAAGGATCGAGGGGAAGAAGATGCTGATGGCCAGAAAACCCAGGACCTATTC
CGCAGGGTGCCTCATCTCGTAATAAACTGACACCCAGATGTTCCAGCAGCTGATGAAGCAAGCTGACGCACTGT
GCCATGACACAGGAACGCCCTCAAAAGGGTCAATTGACCTCATTTTGAAGAGGCTTTCAGAGCAAGCTTCT
TCTGTGGCTTATGCCAACATGTGCCGTGCTCTATGGCGCTGAAAGTGCCACTACGGAAGGCCAACAGTGACT
GTGAATCTCCGAAAGCTGTGTGTGAATCGATGTCAGAAGGAGTTTGAAGAAAGCAAGATGATGATGAGGTTTTT
GAGAAAGACGAAAAAGAGATGGATGAAGCTGCTACGCGACAGGAACAGAGCCCTGAAGGAAGAGCTGGAAGAG
GCTCGGGACATAGCCCGCGCGGCTCTTTAGGAAATATCAAGTTTATTGGAAGAGTGTTCACAACTGAAGATGTA
ACAGAGGCAATAATGCATGACTGTGTGGTCAAACTGCTTAAGAACCATGTATGAAGAGTCTGATGGCTTTGT
CGTCTGCTACCCACATTTGGCAAGAGCCTGGACCTTGAAGAAAGCAAGCCCGAATGGATCAGTATTTCAACCAG
ATGGAATAAAATCTAATAAGAAAAAGAGCGTCACTCCGCATCCGCTTTATGCTGCAGGACGTGCTGGATCTGCGA
GGGAGCAATTTGGGTCCACCGCGGAGGATAGGGTCCAAAGCAATTGACCTGCAATAAGAGAGCTGATGAT
GAAGAACTACGAGAGCACAATAAGTGACGACGCTCATGGCCAAAGGCGAGTGAACAGCGTGGGGCGGCTCTCA
GGCCCTCCCATCAGCCGTGGACTTCCCTTGTGGATGATGGTGGCTGGAACACAGTTCCTCATCAGCAAAAGTACG
CGCCCATTTGACACTCTACGACTACCAAGATCAACAGACTCCAGCTTGGCTCATGCAATCTTACACCAAGCTCTTGA
CCTGGAGGGCGACTGAGCTGGGGCAAGGGCAGCAGCGGAGGCTCAGGAGCGCAAGCCCTCAGACGCAAGTACAGAA
GCTGCTCGCCAGCTACTAGTACTTTGAACTGCTTTCAGACCTTCAACAGCGGTACCCACAGAGACGACAGAT
AATAGACGTGTGTGTCAGAGGAGTAGCTTGAAGCCGAGAACGAGGCGAGAAAGCTGGAGACCGAGGAGACCCCTTA
GAGCGGAGTGAACGGGGAGGGACCTGTTGGGACCGGCTTGATCGTGCAGGACCTGCTACTACCAAGCGAGGCTTC
AGCAAGGAAGTGGAGAGCGGAGTAGAGAACGGCCCTCCAGCCTGAGGGGCTGCGCAAGAGGAGCTGAGCTACG
GAGGATCGGGACCGTGGCGGGATGCGGTGAAGCGAAGAGCTGCCTTACCCCATGTAGGCCCTTGAAGCGGGT

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FIGURE 1313B

CTCTCTGAGGAGGAGTTAGAGAAGAAATCCAAGGCTATCATTGAGGAATATCTCCATCTCAATGACATGAAAAGTA
GGCAGTCCAGTGCCTGCAGGAGCTGGCCTCACCCCTCTTGCTCTTCATCTTTGTACGGCATGGTGTGAGTCTAC
GCTGGAGCGCAGTGCCATTGCTCGTGAGCATATGGGGCAGCTGCTGCACCAGCTGCTCTGTGCTGGGCATCTGTCT
TACTGCTCAGTACTACCAAGGGTGTGATGAAATCTTGGAAITGGCTGAGGACATGGAATTGACATCCCCACCGT
GTGGCTCTACCTAGCGGAAGCTGGTAACACCCATTCTGCAGGAAGGTGGGGTGCCCATGGGGGAGCTGTTTCAGGGA
GATTACAAAGCCTCTGAGACCGTTGGGCAAGAGCTGCTTCCCTGTTGCTGGAGATCCTGGGCCCTCTGTGCAAAAAG
CATGGGTCTTAAAAAGGTGGGGACGCTGTGGCGAGAAAGCCGGGCTTAGCTGGAAGGAATTTCTACCTGAAGGCCA
GGACATTGGTGCATTTCGCTGCTGAACAGAAGGTGGAGTATACCTGGGAGAGGAGTCGGAAGCCCTGGCCAGAG
GGCACTCCCCCTCCGAGGAGCTGAACAGGCAGCTGGAGAAGCTGCTGAAGGAGGGCAGCAGTAACACAGCGGGTGT
CGACTGGATAGAGGCCAACCTGAGTGAGCAGCAGATAGTATCCAACACGTTAGTTCGAGCCCTCATGACGGCTGT
CTGCTATTCTGCAATTATTTTTGAGACTCCCCCTCCGAGTGGACGTTGCAAGTGTGAAAGCGCGAGCGAAGCTGCT
GCAGAAATACCTGTGTGACGAGCAGAAGGAGCTACAGGCGCTCTACGCCCTCCAGGCCCTTGTAGTGACCTTAGA
ACAGCCTCCCAACCTGCTGCGGATGTTCTTTGACGCACTGTATGACGAGGACGTGGTGAAGGAGGATGCCTTCTA
CAGTTGGGAGAGTAGCAAGGACCCCGCTGAGCAGCAGGGCAAGGGTGTGGCCCTTAAATCTGTACAGCCTTCTT
CAAGTGGCTCCGTGAAGCAGAGGAGGAGTCTGACCACAACGTAGGGGCTGGTGGGGCCGGGGACCTGGAGCCCCAT
GGACACACAGATGGCCCCGCTAGCCCGCTGGACTGCAGGGGGGCGGCAGCAGCGCGGTGGCAGTGGGTGCTGT
AGTGATGTGTCTGAACATAATAAGTGGCTGAAGAGGCAGGATGGCTTGGGGCTGCCTGGGCCCCCTCCAGGA
TGCGCCGAGGTGCTCTCTCTCCCCCTGGGGCACAGAGATATATTATATATAAGTCTTGAATTTGGTGTGTC
TTGGGGTGGGGAGGGGCACCAACGCTGCCCCCTGGGGTCTTTTTTTTATTTTCTGAAAATCACTCTCGGAGCTG
CCGTCTCGCTGCTGGGGGCATATGCCCAAGCCCTGTACCAACCCCTGCTGTTCCTGGGCAGGGGGAAGGGGGG
GCACGGTGCCGTGAATTAATAAACAT

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FIGURE 1314A

GCCGCGGCCACCGGAAGAGTTCGCGGTGCGCAATCCAGTTCGGGAGAGTGGGGAGCGGAAGCGGCGGCCGCGCGGCGG
GGCGGGCGGCGCTGGGACCCGGTAGCGGCCGGAGAACAGGGAGAGTGGCGCCGCCAGCAGCCGCCGAGCTGGGTT
GAGCCGCTGGGCGCGCGCGCGGCCGCCCGCTCTGGGAGGCTCGGCCCGGCCGCCAGCAGCCGCCGCGCGGG
CCGCGCGGGCCGAGGGCCAGAGCCATGGCGGAGACCAAGATCATCTACCACTTGGATGGGCAGGAGACGCCGTATCC
TTGTGAAGCTGCCCCCTGCCCGGAGCGCGTACCTTGGCGGCTTTAAGGGCGTTTTCAGCAGCACCCAGCTATA
AGTTCTTCTTCAAGTCTATGGACAGGATTTCGGAGTGGTGAAGGAGGAGATCTCGGATGACAATGCCAAGCTAC
CATGCTTCAATGGCCGGGTGGTGTCTTGGCTGGTGTACGCTGAGGGGCTCACACCCAGACCCAGCCCCCTTCTGTG
CTGATAACCCATCGGAGCTGCCACCACCTATGGAGCGCACGGGAGGCATCGGGGACTCCCGACCCCCATCCTTC
ACCCTCATGCTGGTGGGGGACGCCAGGAGAACCCTGGACAATGACACAGAGACGGACTCTTTGGTGTCTGCCACG
GAGAGCGGCCACGCCGGAGGGATGGCCACGAGCATGCAACCCGGCTAAATGGAAGTGGCAAGGGGGAACGGCGGG
GAGAACCAGGGGGTTATGATAGCTCATCCACCCTTATGAGCAGTGAGCTGGAGACCAACCAAGCTCTTTGACTCAG
ATGAGGATGACTCCACCAGCAGGTTTCAGCAGCTCCACAGAACAGAGCAGTGCTCAGCGCTGATGAGAAGACACA
AGCGCGGCGCGCGGAAGCAGAAAGGTTTCTCGGATTGAGCGGCTCTCGTCTTTCAGCAGCATCAGGACTCCACCA
TGTCACCTCAACATCATCAGCGTCACTCTCAACATGGAAAAATATAACTTCTTGGGCACTCTCCATTGTGGGCCAAA
GCAACGAGCGTGGTGACGCGCGCATCTACATTGGCTCTATCATGAAGGGTGGGGGCTGGCTGCTGATGGACGCA
TCGAGCCAGGAGATATGTTGTTACAGGTAACGAGATCAACTTGTAGAACATGAGTAATGACATGAGTCTCGGG
TACTGCGGGAGATTGTGCACAAACCGGGGCCCATCACCTTGACTGTAGCCAAGTGTGGGACCAAGTCCACGTG
GTTGCTTCACATTGCCCAGGAGCGAGCCATCCGGCCCATGACCCTCGGGCTGGGTCTCCCACACTCAGCGCA
TGACCGGCACTTCCCTGTACATGGGATGAGCCCTCCCTGAGCACCATCACTCCACAGCTCTCCATCAGCA
GTTCCATCCCTGACACAGAGCGCTAGACGACTTCCACTTGTCCATCCACAGTGACATGGCTGCCATCGTAAAAAG
CCATGGCTCCCTGAACTCAGGGTCCGTGACCGCATGTGGCTGACCGCATGTGGCTACCGCTTACCTATGCTTTTCA
TCGGCTCAGATGTGGTGGACTGGCTGTACCACAATGTGAAGGCTTCACGACCCGAGGAGGGCCGCAAGTATG
CCAGCAACCTGCTGAAAGCTGGCTTCATCCGCCATACCGTCAACAGATCACTTCTCCGAGCAGTGCTACTACA
TCTTCGGTGACCTTCGGGCCAACATGGCCAACTGTCTCTCCACGATCAGCATGAGTCCAGTGGCGCTCTTGACC
AGGACACACTGGCCCTTTGCCGCAACCCGGGGGCCGCCCTTGGCCCATGGCTTTCGGTACCAAGTACCCGCCAC
CCCCGCACCCATACAACCCGCACCCGGGCTTCCCGGAGCTGGGCTACAGCTACGGCGGGGGACGCGCCAGCATC
AGCACAGCGAAGGCAGTCCGGAGCAGTGGCTCAACCGTAGCGGCACGCGATCGGAGGAAGGAGAAGGACCCGAAGG
CCGGGGACTCCAAGTCCGGGGCAGCGGCAGCGAATCGGACCACACCAACCGCACGACGCTCGGGGGCGCGGGG
AGCGGGCGCCACGAGCGCTCAGCGGCCGCGGCCACGACCCACGACCCAGCCACCTTCCCTGGCCAGCA
GCCCTTCGACGACCCACACACACCCGAGCTACGGTCTCCCGGAGTGGCCCCCTCTACGGCCCCCCCCATGCTGA
TGATGCCCCCGCGCCCGCGGCCATGGGGCCCCAGAGGCCCTCCGGCGCCGCGACTGGGCTCAGTGCCCCCGG
AACTGACCGCCAGCAGACAGTCTTCCGATGGCATGGGAACCCCAAGTGAAGTCTTTTGGATGTGATGTAG
CAGGGGCCCTCCCCAGCTCATTCCGCTCCACCCAGCGCGGCTCGGTTCTCTCCATCCGTCGGCTTTTTT
TACTTTGTGTGTTACTGAAAGGAAATAAAGGAATAAATCAAGGTGGCGTAAGTCTGCTCGAAGGCTGTCGGA
GGGTGGGTGCACCTACCGATTGGCTCTCGACGCCCTTAACCTGCCTTGGCCCCAGTTCGTTTCTCTGCCCCAC
TAATCCCTGCGCAGGACTTCCAGGACCCCTTTTGCTCTGGGACCAAGACTTGTGGTGTCAACCTTACTCCCC
TCTGCAACCCCATTTTGGGAGTTGATCCCAAGCAATGACCTTGGTGGCAGCTCACTCCCTCATCTCTCGTTTC
CCCTTTAGCTCCCTTTACCAATTTATTCAGCTACATCATCCCTCTATTAACCCCAACCCATCAGGCAGCTGTGCA
AACCTTTGACTTCTTACCCACATTAAGTAAACCAAAATATATTGCTTCACTGCCCCCTACCACTACCCCTG
CCTGCTGCCTCAGTCTGCAACCTAAAGCTGTAGTGCCTCCAAAGCCATCCATGCCATCCCTGCTGTGCTCA
GATCAGAGGCCCAAGGGGCCCTTCACTGGCTGAGCAGCTGGTGGCTTCCAGGGAGCATCTCTGCTCATCCCT
GCCCATGCTCCCTTGGTGGTGTGCTTCCCTGAGACCCCTAACCTCTAACACAGCGGCTCATCTCACTCCGTCAG
GCCTGAAACATCTCTTTCTTTCTTTTCTCTCCCCCAATTTCCCTGGGCTGGAGCGACCCAGAATTTCTGGGG
TGTTGACTTTCTGTGAGCCGCCAGCGAGGGGAGGCCAGCTCCGAGGAGACAGAACCTGCTTCAGCAGCC
CCTCAGGGCTTCCCAAGGATGTCAGGCCCCCAACCCACACGTTAACATAATGAGTCACTAGGCTTCTGGGGAGG
GCCCAACTTCAACCATGATGAGAGACTCTCTCTCTTCCAGAGAGAATCGGATCGCACAGCAGTGTGGCAGCGTG
CGCGGGGGGAAGGGGGGCTCTTTAGCTCTCTTATCTCTTCTCTCTCACTCATGTGCTGATGTCAGACAGATG
GCATACACAGGTGCCTATGCAAGTTCAATTAAGCCTCAGGGCTGGTCCCTGGCCAAAGGGCTGGACCTCTTAAT

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FIGURE 1314B

CCTCTCCTAGGTTGTGGGGCTGGTCCCTTGACACCCCTTCTCCCCTTCCTGGTAGACCTTAAACCTCGCACACATG
TCCCCAGCATTTTCTCACCTGGATAAAGCCCATAGCTGGGTCTCAGGCTGGGCTCAGCAAAGGACTCGCCTTGC
AACCGACAGGCCATTCCACCCCCACACAAACCTCCCTGTTTTACATTACCATGGCATCCAGAGCAAGGA
CACAGGAGCCCCACAGGCCAGTTGAGGTTGGGCAAGGAGACTTCCAGGACTTCCAGACAGAGTACCAGGTTTTATT
TTTCACCTTATTCTCTACTTTAAACAATCATAACTTCTCTTTAAGCCTCTGCTATAAATTCCTCGGCTCTCC
TGGGCTTCCATATTTTGGGGGCTGGGGTGTCAAAGTGAGATGAAGTTCTTAGCTCCAGGTTTTGGGGTAAACCA
AGGTAGGAACATTTTGGCATTATTTCAATTAACAATACTTCTTTGGACGGGTGCGGTGGCTACGCTCTGTAATC
CCAGCACTTTGGGAGGCTGAGACAGGTGGATCACTTGAGGTCGGGAGTTCGAGACCAGCCTGGCCAACATAGCAA
AACCTTGCTCTACTAAAAATACAAAAATTAGATGGGTGTTTTGGCACCTGCCTGTAATCTCAGCTACTCAGGAG
GCTGAGGCACAAGAATCGCTTGAATCCAGGAAGCAAGCGGAGGTTGCAGTGAGTTGAGATCGCACTCCAGCCTGG
GTGACAGAGTGAGATTCTGTCTCAAAGCAAACTAACAAAGAAAACATACTTCTGGGGTTTTGGTGTGCAGA
GGGCTTTGTGGAAGTGTGACTCAATCTTGCTGCCTTCTGGGAGCTCTAGAATTGTTCCCAACCCAGTCCATGG
CTTCTAGCCACCACTACAGGGCTGTTTCACTGACTTCTCTCTGACTCTGTCTTGTCCGACTCTCTTGAGAATT
TCTCAACGATTGCTCATGCCGTGCAGTATCAGTGCTTCCATCGTTCATCTTTGATTCACTTCTCTTCTCTTCT
ATTACTCCCAAAATGGAGTCATTATCCTGATGTCCTCAATTGCTGCTGATATGCTGGTGATTCCCAAAATACAT
AGCTCCAACCCCCAACTTCCCCCAGACTTTAGATCTGTATTGGTATTACCTACTGGACATCTCTATGGACAGTTC
CGTATAGACTCACTCATCTGCCCAACCAAGTATGTTCTCTCTGAATTCTCTCTCTGGTTACTTCATCACAATCT
ACATAGGCTCACCAGCTAGAAACATTTATGAGCTTACATTCCTTCTTCCATATCTTATCAGCATATCATATCCA
TTTCACTCAACACTCTGTCTTGAATTGGCCCTCCCTCTCCCTCTCTACTTTAATTCATTGGAGCATGGGGATT
TGGAGTTAGGTGGTTTTGGGTTTGAATTCAGCTCTACTATTTTTGGTTGTGTGATAGAGTTATTTAACTCTCT
GAGCCTCAGTTCCCTCGTATGTAAATGATGATAATAACCTACCTCACAGGGTTGTTGTGAGGATTTAAATTA
GATATTGTACGAAAAGTGCTAGCACAGTGCTTGGCACACAGTAGAGTAGTGCTCAATAAATGGTAGCTATTAT
TATT

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FIGURE 1315

CCGAGGCAGCGGGCAGACGACGAGGGGGCGGGCGGACATCTTGGGATCCGGAGAGTGCCGGGCGGGCAGAGCAG
GGGGCCGAGGACACCCAGGCTCTGTTCTCAGAGCGATGGGCCGCGGAGACTGATCTGCCGCCATGATTGGAGGCTTA
TTCATCTATAATCACAAGGGGGAGGTGCTCATCTCCCGAGTCTACCGAGATGACATCGGAGGAAACGCAGTGGAT
GCCTTTCGGGTCAATGTTATCCATGCCGGCAGCAGGTGCGCAGCCCCGTCACCAACATTGCTCGCACCAGCTTC
TTCCACGTTAAGCGGTCCAACATTTGGCTGGCAGCAGTCACCAAGCAGAATGTCAACGCTGCCATGGTCTTCGAA
TTCCCTCTATAAGATGTGTGACGTGATGGCTGCCACTTTGGCAAGATCAGCGAGGAAAACATCAAGAACAATTTT
GTGCTCATATATGAGCTGCTGGATGAGATTCTAGACTTTGGCTACCCACAGAATTCGAGACAGGCGCGCTGAAA
ACCTTCATCACGCGAGCAGGGCATCAAGAGTCAGATGTAGACAAAAGAAGAGCAGTCACAGATCACCAGCCAGGTA
ACTGGGCAGATTGGCTGGCGGCAGAGGGGTATCAAGTATCGTCGGAATGAGCTCTTCCGGATGTGCTGGAGAGT
GTGAACCTGCTCATGTCCCCACAAGGGCAGGTGCTGAGTGCCCATGTGTGCGGCCGGGTGGTGATGAAGAGCTAC
CTGAGTGGCATGCCATGAATGCAAGTTTGGGATGAATGACAAGATTGTTATTGAAAAGCAGGGCAAGGCACAGCT
GATGAACAAGCAAGAGCGGGAAGCAATCAATTGCCATTGATGACTGCACCTTCCACAGTGTGTGCGACTCAGC
AAGTTTGACTCTGAACGCAGCATCAGCTTTATCCCGCCAGATGGAGAGTTTGAGCTTATGAGGTATCGCACAAACC
AAGGACATCATCTCTCCCTTCCGGGTGATCCCGCTAGTGCAGAGAAGTGGGACGCACCAAACTGGAGGTCAAGGTG
GTCAATCAAGTCCAACCTTTAAACCCCTCACTGCTGGCTCAGAAGATCAGAGGTGAGGATCCCAACCCCACTGAACACA
AGCGGGGTGCAAGGTGATCTGATGAAGGGGAAGGCCAAGTACAAGGCCACGCAGAGAATGCCATCGTGTGGAAGATC
AAGCGCATGGCAGGCATGAAGGAATCGCAGATCAGCGCAGAGATTGAGCTTCTGCCTACCAACGACAAGAGAA
TGGGCTCGACCCCCCATTTCCATGAACCTTTGAGGTGCCATTGCGGCCCTCTGGCCTCAAGGTGCGCTACTTGAAG
GTGTTTGAACCGAAGCTGAATACAGCGACCATGATGTATCAAAATGGGTGCGCTACATTGGCCGCGATGGCAAT
TATGAAACTCGCTGCTAGCTGCCACTAGGCAGCTAGCCCACTCCCCAGCCACCTCTCCACAGGTCAGGTTGC
CGCTCCCTCCCCACCACACACTAGTGTCTCCTCCCTCTGCTTTGCTGCTTCCCTTTGACCAAGCCGAGTCT
AGGTCTGGGCCAAGCATTACAAGTGGGACCGGTGGAGCAGCCCTGGGCTCCCTGGGCGAGGGAGTCTCTGAGG
CTCCTGCTCTCCCATCCACCTGTCTGTCTGGCCTAATGCCAGGCTCTGAGTCTGTGACCAAGCCAGGTGGGT
TCCCTTTCTCTCCCAACCCCTGTGGCCACAGCTCTGGAGTGGGAGGGTTGGTTGCCCTCACCTCAGAGCTCCCC
AAGGCCAGTAATGGATCCCCGGGCTCAGTCCCTACTCTGCTTTGGGATAGTGTGAGCTTCATTTGTACACGTG
TGACTTCGTCAGATTACAACCCATAAACTCTGTAGAGTGG

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FIGURE 1316

GGTGGGCCACACAAGCGGCGCACCGTTAAGATGCGGCTGGGCTGCGGAAACGGGCCGGTCCGGTCCCGGGC
CCAGGCAGAGGGACTCTGCAAGCAATGGCTGCAGCGCGCTTGGCAAGAGCGGCGCTGCTGCTGCGGGAGCCGG
CTACACGCTGCTGGTGGCCGCTGCTCTGCTGCGGAGGTGGGCATCACCTTCTGGGTCAATTCACAGGGTGGC
ATACACAGAGATTGACTGGAAGCCCTACATGGCCGAGGTAGAAGGCGTCATCAATGGTACCTATGACTATACCCA
ACTGCAGGGTGACACCGGACCCTTGTTGTACCCAGCTGGTTTCGTGTACATCTTTATGGGGTTGTACTATGCCAC
CAGCCGAGGCACTGACATCCGCATGGCCAGAACATCTTTGCTGTGCTCTACCTGGCTACCTTGTCTGTGCTT
CTTGATCTATCACCAGACCTGCAAGGTACCTCCCTTCGTCTTTTCTTCATGTGCTGCGCCTCTTACCGTGTCCA
CTCCATCTTTGTGTGCGGCTCTTCAATGACCCAGTGGCCATGGTGTGCTCTTCTCAGTATCAACCTCCTGCT
GGCCAGCGCTGGGGCTGGGGCTGCTGCTTTTTCAGCCTGGCAGTCTCTGTGAAGATGAATGTGCTGCTCTTCGC
CCCTGGGTACTGTTTCTTCTCCTCACACAGTTTGGCTTCGCTGGGGCCCTCCCAAGCTGGGAATCTGTGCTGG
CCTTCAGGTGGTGTGCTGGGGCTGCCCTTCTGCTGGAGAACCCAGCGGCTACCTGTCCGCTCCTTTGACCTTGG
CCGCCAGTTTCTGTTCCACTGGACAGTGAACCTGGCGCTTCTCCAGAGGCGCTCTTCTGCAATCGAGCCTTCCA
CCTGGCCCTGTTGACTGCCACCTCACCTGCTCCTGCTGTTTGCCTCTGCAGGTGGCACAGGACAGGGGAAAG
TATCTTGTGCTGCTGAGGGATCCCTCCAAAGGAAGTTCCACCCAGCCCTTACACCCAACAGATCGTTTC
TACCTCTTACCTCCAACTTCATTTGGCATCTGCTTCAGCCGCTCCCTCCACTACCACTTCTACGCTCTGATATT
CCACACACTGCCCTACCTCTGTGGCCATGCTGCACGGTGGCTCACACACCTGCTCAGGTGTTTGGTGTGGG
GCTCATCGAGCTCTCTGGAACACATACCTTCCACATCCTGCAGCTCTGCTGCCCTGCACATATGCCATGCCGT
CATCTGCTGCAGCTCTGGCTGGGCCCGCAGCCTTTCCCAAGAGCACCCACACAGCAAGAAAGCCCACTGAG
TCCACCCCTTTCCCTCAGGACCTGAGTCTACCTCAGGACCTGGGTGGGTGGACTCTGCCCTTCCAAATAAAC
CTTGCTAAGTCCAAAAA

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FIGURE 1317

MAAGLRKRGRSGSAAQAEGLCKQWLQRAWQERRLLREPRYTLLVAACLCLAEVGITFWVIHRVAYTEIDWKAYM
AEVEGVINGTYDYTLQGGDTGPNVYPAGFVYIFMGLYYATSRGTDIRMAQNIFAVLYLATLLLVFLIYHQTCCKVP
PFVFFFMCCASYRVHSIFVLRLFNDPVAMVLLFLSINLLAQRWGWGCCFFSLAVSVKMNVLFPAGLLFLLLTQ
FGFRGALPKLGICAGLQVVLGLPFLLNPSGYLSRSFDLGRQFLFHWTVNWRFLPEALFLHRAFHLALLTAHLTL
LLLFALCRWHRGTGESILSLLRDP SKRKVPQPLTPNQIVSTLFTSNFIGICFSRSLHYQFYVWYFHTLPYLLWAM
PARWLTHLLRLVLGLIELSWNTYPTSCSSAALHICHAVILLQLWLGPQPPFKSTQHSKKAH

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FIGURE 1318

GGCAGCAGGGGGCCGGCGGCTCTGGCTGCCCGCGGTTGAGAGCAATGCGCTCTCCAGGGGCAGGTAGGGCGCCTCC
GGAGTTACCGGAGCGGAATCGGGGTACCCGCGAAGTCGAGTACGGGATCAGCGCTACCAAGCGCCGACGATTTC
TCGCCCTCAGATTGGTTCGGGAACTTCTCTCTCTTCGTCGCCCTCTAGAGCGGAGCTCGCGGCCGAGGACGTC
TATCTCTTGTGTAGGTTTCGGGAACTCGGCTTGCCTTGCAGTCTCAGAGCTGTTCTCGGAGGCTTCCCTAATGTGACAG
TGTGGACTCTCAGTCTGTCGTGGTGGCTGCCATCGAGGCTCGTATGCCCATGTGGCCGAGCTCGGCTGGGAGAC
CATGGATGTGCGGAAGCTGGACTTCCCAGTGCTCTTTTATGTGTGTGCTCGAGAGGAGCAGCTGGATGCCCT
CGTGGCTGGGGAACGAGATCCCTGAGCGTGTCTCTGAAGGTGTCCACACTGTGGACCAGGTGTGTGAGTGAAGT
GAGCCGGGTGCTGTGCTCGGAGGCGGGTTATCTCACTGAGTCTCTGCTGCCCCCACTTTCGGCCAGACATCT
TGCCCAAGGCTATTATGGCTGTCTCGGACGATCTGACTTATGGCAGGGTTTCCACTTCCATTCTTACTCAT
GCACAAGGCGGGAAGCTCAGTGTGGCCAGCTGGCTCTGGGGGCGCAATCTCTCACCCCAGACCTCCAC
CTCAGCTGCTCTCTCAGGACTCAGATCTAGGAGCTTCTTGTAGCCATTCTAGCTCTGAGCCGACGAGCATGGT
CTCCACCTCTCTGCCATTCTGCCCTGGGCTCCAGTAGTTTGAATCTCGACTTAGGACTTGGGTTGGGT
CCAAGGTGCTTACATCCAGGGGCTCATGCTTAAGATAGAGGCTGGGAGCGAACCCATGAAACCAATACAGCC
CAGCTCCAACATAGATCCAGAAAAA
AAAAA
AAAAA

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FIGURE 1319

MASPGAGRAPPELPERNCGYREVEYWDQRYQGAADSAPYDWFQDFSSFRALLEPELPELRPEDRIILVLCGNSALS YE
LFLGGFPNVISVDYSSVVAAQARYAHVPQLRWETMDVRKLDFFSASFDDVLEKGTLDALLAGERDPWTVSSEG
VHTVDQVLSEVSRVLVPGGRFISMTSAAPHFRTRHYAQAYYGWSLRHATYGS GFHFHLYLMHKGKLSVAQLALG
AQILSPRPPTSPCFLQSDHEDFLSAIQL

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FIGURE 1320

GAGGCTGCGCGCCGAGGTTCCGGCTGCTGGCGCGTTCGGCCGCGAGTTTGACTCCCGTGCGGTGCGGCCAG
CAGCCACAAAGCTCCCGTGCCATTGCTCCTTGACTCCGCGGTCACTGCCGCTGTCCAACCCCTCCCCGGGG
CTTGCGCGCGGCTCCACACCCCTCGGCCGTGTACGCGCTTGCACTGCCGCGCCGAAAACATGTTGCAGAC
ACCAGAGAGCAGGGGGCTCCCGTCCCGCAGGCCGAGGGGAGAGGATGGCGCCATGATGGTGAGACCCGGG
CCCGACCGCTCTGCAGAGCGCCCCAAGGAGGAGCTTGGCGCGGAGGGAGGAGGGGCTCGCGGACCCGCCCT
CACCCGGAAGGCGCGAGGGCCTTGGCGGCCAAAGCCTTGGAAGGCGCAGGGCCTACCGCCGGCTGAATCGGAC
GGTGCGGAGTTGGTGCACTTCTCCTGTTGAAAGACAAGAAGAAGTCCCATCACCGCTCGGAGATGGTGAA
ATACGTTATTGGAGACTTGAAGATTCTGTTCCCGACATCATCGCAAGGGCCGAGAGCATCTGCGGTATGTCCT
TGTTTTGAGCTGAAACAGTTTGACCGCAAGCACACACTTACATCCTGATCAACAACTAAAACCTCTGAGGGA
GGAGGAGGAGGAGATCTGGGAGGAGATGGCCCCAGATTGGGTCTGTTAATGATGATCCTGGGCCTTATCTATAT
GAGAGGTAATAGCGCCAGGAGGCCAGGCTTGGGAGATGCTGCGTCGGTTGGGGGTGCAACCCCTCAAAGTATCA
TTTCTCTTTGGGTATCCGAAGAGGCTTATTATGGAAGATTTTGTGCAGCAGCGATATCTCAGTTACAGCGGGT
GCCTCACACCAATCCACCAGAATAIGAATTCTCTTGGGGTCCCCGAAGCAACCTGGAAATCAGCAAGATGGAAGT
CCTGGGGTTCGTGGCCAAACTGCATAAGAAGGAACCGCAGCACTGGCCAGTGCAAGTACCGTGAGGCCCTAGCAGA
CGAGGCCGACAGGGCCAGGCCAAGGCCAGAGCTGAAGCCAGTATGAGGGCCAGGGCCAGTGCTAGGGCCGGCAT
CCACCTCTGGTGAGGGTTGGTGAAGTTGGCCAGTGGGTCCCGTGAGGACGAACACTGTCCTGAGTCATAAG
TAATATGGTGGGGCAGGGTCTTATTTCTGTAGAAATCGTGTGACTTTAAGGATTAGATTTTGTATCTTATGT
TTTGTAACATTTAATAATTACTGTTAAATGCTGTTTGTAAATGAGATTGGTCTACTTTTTCTGTAGGATTTTA
TTGTAGAGTTTTGCTGTTTTGTAAATGGATGGAAGAACCTTTGTATTATACTGIGATTTTGAACAGATTATGC
AACATTGGAAGGAAGGCTGACTTTGATGGTTTGAAGGAACCTCAGCAGTATGATGATCGGTTCCAGGGGAAAAA
AATAGCTGGTTGGTGTCTAGCCCCCAACACTTTTGTCTGTTGTATAAAAGAAGAAAGACTGGCATGTACCTT
CATTTGCTTAGCTATTTGAGTATCTAGAGAAAAATAAAATGCAATGAGTTAGCAGTATACCTTGCCACACTTAA
TAAATTAACATTTTGTGGAGC

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FIGURE 1321

MLQTPESRGLPVPQAEGEKDGGHGETRAPTASQERPKEELGAGREEGAAEPALTRKGARALAAKALARRRAYRR
LNRTVAELVQFLLVKDKKSPITRSEMVKYVIGDLKILFPDI IARAAEHLRYVFGFELKQFDRKHHTY I LINKLK
PLEEEEEEDLGGDGPRLGLLMMILGLIYMRGNSAREAQVWEMLRRLGVQPSKYHFLFGYPKRLIMEDFVQORYLS
YRRVPHNTNPPEYEFWSGPRSNLEISKMEVLGFVAKLHKKEPQHWPVQYREALADEADRARAKARAEASMRARASA
RAGIHLW

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FIGURE 1322

AGAGCTATGGCTCGAATTCAGAGTTCGAGTGGTGGGACTCACCGCTCTGGCCAGGGTGCTTTGGAAACATG
TGTCGTGGAGGCCGAAGGTTTGCACCAACCAAAACCTGGCGCCGTTGGCATCGTAGAGTGAACACAACCAAAAA
CGATATGCCATCTGTTCTGCCCTGGCTGCCCTCAGCCCTACCAGCACTGGTCATGCTCTAAAGGTCATCGTATTGAG
GAAGTTCCTGAACCTCCTTTGGTATTGAAGATAAAGTTGAAGGCTACAAGAAGACCAAGGAAGCTGTTTGGTC
CTTAAGAACTTAAAGCCTGGAATGATATCGAAAAGGCAGCAGCTACCAAGAAACCAGCCCTGAAAAGAAGCCT
GCAGAAAAGAAACCTACTACAGAGGAAAAGAAGCCTGCTGCATAAACTCTTAAATTGATTATTCATAAAGGTC
AAATCATTTGGACAGCTCTTTTGAATAAAGACCTGATTATACAGGC

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FIGURE 1323

ATTCCCAGAGTTCGAGGTGGTGGGACTCACCCTCTGGCCAGGGTGCTTTTGGAAACATGTGTCGTGGAGGCCGA
AGGTTTGCACCAACCAAAACCTGGCGCCGTTGGCATCGTAGAGTGAAACACCAACCAACGATATGCCATCTGT
TCTGCCCTGGCTGCCCTCAGCCCTACCAGCACTGGTCATGTCCTAAAGGTCATCGTATTGAGGAAGTTCTTGAACTT
CCTTTGGTATTGAAGATAAAGTTGAAGGCTACAGAAGACCAAGGAAGCTGTTTTGCTCCTTAAGAAACTTAAA
GCCTGGAATGATATCGAAAAGGTCTATGCCTCTCAGCGAATGAGAGCTGGCAAAGGCAAGAAGCCTGTGGTAGGT
AAGAAAGGAAAGAAGGCTGCTGTTGGTGTAAAGAAGCAGAAGAAGCCTCTGGTGGGAAAAAAGGCAGCAGCTACC
AAGAAACCAGCCCTGAAAAGAAGCCTGCAGAAAAGAAACCTACTACAGAGGAAAAAGAAGCCTGCTGCATAAACT
CTTAAATTTGATTATCCATAAAGGTCAAATCATTTTGGACAGCTTCTTTTGAATAAAGACCTGATTATACAGGC
AGTGAGGAA

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FIGURE 1324

MCRGGRRFAPTKTWRRWHRVNTTQKRYAICSALAASALPALVMSKGHRIEEVPPELPLVFEDKVEGYKKTKKAVL
LLKKLKAWNDIEKVYASQRMRA GTGKKPVVGKKGKKA AVGVKKQKPLVGKKAATKKPAPEKKPAEKKPTTEEK
KPAA

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FIGURE 1325

ATGACTGGAGTGAAGCTGGTCTGAACTCGAGGCTGTGGAAAGCGCTCATGAAAAGGCCTGTGCAAAATTATTA
CCCTTCTGTGAAGTACTTAAACCTACTCAAGGTGCAAGCTTTACACACCAATGCCGGGCTTGATTAATGGTATC
AGAGGAGTTCGGTTCCTCCCGAGTTTCTCCACCTCTGAAAAATGCGGCCGGAACCTTAATCCGCTGCGAGGCT
GCAGCATCTTTCGGTGCTGTCCCTCCACCCCGTGTATCCCCACCATCCCCAGGCCGCTGTTCGGGTGCACT
TGCTGTGTCAATTACCCCTCCCGGTGCTCTGGGGGGCAGCGCTCTCAGACATTCCCTCAAACCTGCTTCCG
CCCCCTCTCCCAACTGCGGAGCTCCGCCAAGCGTCTCTTCGCGAGCTCCAAGTCCCTCGGGGCTCTCGAA
TCTCCAGAGACTGTGAAAGCCTCGCAACTCCGCGATCCCCATCCACTCGGAGCCCCCGCACTCGCGCTCCGGG
GCGCTCCCCACGACGTGTGAAAGCCGCTCTCCCGCGCTCCGGAACCGTTAGCCGCACCCGCCCGACGCCCTC
CCAGGAACCAACCGACCGGGCCGCGGGGGAGGGGGCGGTCAACCCGGGGGGGGTCAACCCAGCTACTGCACC
CCGACTTTGAAGATTTGAATCAGCCCGTGAACCTAGCCGGCTGGGCCTGTCCGACAGTGGCCGGACGCCCT
TCCGATCTCCCCCTGCCCCGCAAAGCCCCCTCACCTGAGCGGCCCTCTCTCTCCCTTGACAGGGCCCCGGC
GGCGCAGGCGCGCTACGCACGCGCGAGCGGCCCTGGCGCCTGGGCGAAAGGCTGGGCCGAACCGCTCCGAAG
ACGGTGAACCGCTCCGCGCACCAGCGGCTGGACTCTGCGCCGACGCTGCCAACAGGCTGGAGCGCTGGCCCGGC
CCCCCGCGGCTCGCTGCTCCGCCCGCCGCCATTGGCCCGCGGCCCT**TAG**

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FIGURE 1326

MTGVKLVLSRLWKALMEKACAKLLPFCEVLKTYSRCKLYTMPGLINGIRGVRFPPFSPPSENAAGTLIRCEA
AASFGAVPSTPVLSPSPGRCSGCTCLCHLPPPGALGGSASQTFFSNCFPPPPNCGAPPSVSSREPPSPLGALE
SPETVKASQLRDPSTREPPHSRSGAPPPRRVESRSPRAPEPLAAPARRLPGTKPDRAAGGGGQPGGGHP SYCT
PTLKI LNQFVNSSRLGLSDQWPDAPSDLPAPAKPPHLRRPLSSPCSGPGGAGALTHARSCPGRLGERLGR TAPK
TVNRS AHQR L DSAFQLPTRLERWPGPPRLAAPPAIGRP

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FIGURE 1327

AATTCGGTTGA AACCATCCCTCAGCTCCTAGAGGGAGATTGTTAGATCATGAAACTAATTACCATCCTTTTCCT
CTGCTCCAGGCTACTACTAAGTTTAACCCAGGAATCACAGTCCGAGGAAATTGACTGCAATGACAAGGATTATTT
TAAAGCTGTGGATGCTGCTCTGAAGAAATATAACAGTCAAAACCAAAGTAACAACCGATTGTATTGTACCGCAT
AACTGAAGCCACTAAGACGGTTGGCTCTGACACGTTTATTCCTTCAAGTACGAAATCAAGGAGGGGATTGTCC
TGTTCAAAGTGGCAAAACCTGGCAGGACTGTGAGTACAAGGATGCTGCAAAAGCAGCCACTGGAGAATGCCCGGC
AACCGTGGGGAAGAGGAGCAGTACGAAATTTCCGTGGCTACCCAGACCTGCCAGATTACTCCAGCCGAGGGCCC
TGTGGTGACAGCCAGTACGACTGCCTCGGCTGTGTGCATCCTATATCAACGCAGAGCCAGACCTGGAGCCCAT
TCTGAGACACGGCATTCACTACTTTAACAACAACACTCAACATTCCCTCCCTCTTCATGCTTAATGAAGTAAACG
GGCCCCAAGACAGGTGGTGGCTGGATTGAACTTTCGAATTACCTACTCAATTGTGCAAAACGAATTGTTCCAAAGA
GAATTTTCTGTTCTTAACCTCCAGACTGCAAGTCCCTTTGGAATGGTGATACCGGTGAATGTACAGATAATGCATA
CATCGATATTCACTACGAAITGCTTCCCTTCTACAGAACTGTGACATTTATCCAGGGAAGGATTTTGTACAACC
ACCTACCAAGATTTCGTGGGCTGCCCCAGAGATATACCCACCAACAGCCAGAGCTGGAGGAGACACTGACTCA
CACCATCACAAAGCTTAATGCAGAGAATAACGCAACTTTCTATTTCAAGATTGACAATGTGAAAAAGCAAGAGT
ACAGGTGGTGGCTGGCAAGAAATATTTTATTGACTTCGTGGCCAGGGAAACCATGTTCCAAGGAAAGTAATGA
AGAGTTGACCGAAAGCTGTGAGACCAAAAAAATTTGGCCAAAGCCTAGATTGCAACCGTGAAGTTTATGTGGTACC
CTGGGAGAAAAAATTTACCTACTGTCAACTGTCAACCACTGGGAATGATCTCACTGATGAAAAGGCTCCAGG
TTTTTACCTTTCCGATCATACGAATAGGGGAAATAAAGAAGAAACAACCTAGTCACCTAAGGTCCTGCGAGTA
CAAGGTCGACCCCAAGGCGAGGGCAGGCCAGCATCTGAGAGGGAGGTCTCTTGACCAATGGGCAGAACTT
CACTCCAGGCACATAGCCCCAACCACTCTGCCAGCACTTGAGAGGAAGGACAAGAAAGAAATGGGATAGAA
TTTAAATAGAGAAGAAATGCCATTTATCACTCTGCCTCTGGGTGAAATAAAGATCAGTCTTGATGTTT

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FIGURE 1328

MKLITILFLCSRLLLSLTQESQSEEIDCNDKDLFKAVIDAALKKYNSQSQSNNQFVLYRITEATKTVGSDTFYSFK
YEIKEGDCPVQSGKTWQDCEYKDAAKAATGECTATVGKRSSTKFSVATQTCQITPAEGPVVTAQYDCLGCVHPIS
TQSPDLEPILRHGIQYFNNNTQHSSLFMLNEVKRAQRQVVAGLNFRTYSIVQTNCSKENFLELTPDCKSLWNGD
TGECTDNAYIDIQLRIASFSONCDIYPGKDFVQPPTKICVGCPRDIPTNSPELEETLHTITKLNAENNATFYFK
IDNVKKARVQVVAGKKYFIDFVARETTCSKESNEELTESCETKKLGQSLDCNAEVYVVPWEKKIYPTVNCQPLGM
ISLMKRPPGFSPFRSSRIGEIKEETSHLRSCHEYKGRPPKAGAEPASEREVS

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FIGURE 1329

GGCGGGAAGTGAAGCGACTGTGGGGACATCAGTGATCGTAAGTCTCCTGGGCCCGTTATTCTCAGATTAGGTGAC
GGAGCTAAGACTTCGAGACCATCTCGTCCTTTTGTATCGCGGAAACCTGAGGAACGAGCCGCGCGGTGACCT
GCACGAGAAGCCAGGCTAACTGGGTGAAGTACCATGCAAGCATTCTTAAAGGTACATCCATCAGTACTAAACCC
CCGCTGACCAAGGATCGAGGAGTAGCTGCCAGTGCGGGAAGTAGCGGAGAGAACAGAAAGCCAAACCCGTTCCC
TGGGTGGAAAAATATCGCCCAAAATGTGTGGATGAAGTTGCTTCCAGGAAGAAGTGGTTGCGTGTGAAAAA
TCTTTAGAAGGAGCAGATCTTCTTAATCTCTTGTTTTACGGACCACCTGGAACTGGAAAAACATCCACTATTTTG
GCAGCAGCTAGAGAACTCTTTGGGCTGAACCTTTCCGATTAAAGAGTCTTGAGTTAAATGCATCTGATGAACGT
GGAATACAAGTAGTTTCGAGAGAAAGTAAAAATTTTGCTCAATTAACGTGTGCAGGAAGTCGCTCAGATGGGAAG
CCGTGTCCGCCTTTTAAGATTGTGATTCGGATGAAGCAGATTCTATGACCTCAGCTGCTCAGGCAGCTTTAAGA
CGTACCATTGAGAAGGAGTCGAAAAACACCCGATTCTGTCTTATCTGTAACTATGTCAGTCGAATAATTGAACCC
CTGACCTCTAGATGTTCAAAATTCGCTTCAAGCCTCTGTCAGATAAAATCAACAGCAGCGATTACTAGACATT
GCCAAGAAGGAAATGTCAAATTTAGTGATGAGGGAATAGCTTATCTTGTAAAGTGTGAGAAGGAGACTTAAGA
AAAGCCATTACATTTCTCAAAGCGCTACTCGATTAAACRGTTGGAAGGAGATCACAGAGAAAGTGATTACAGAC
ATTGCTGGGGTAATACCAGCTGAGAAAAATTGATGGAGTATTTGCTGCCTGTGAGAGTGGCTTTTGACAAACTA
GAAAGCTGTGGTCAAGGATTTAATAGATGAGGGTCATGCAGCAACTCAGCTCGTCAATCAACTCCATGATGTGGTT
GTAGAAAAATAACTTATCTGATAAACAGAAAGTCTATTATCACAGAAAAACTTGCCGTAATTGACAAATGCCTAGCA
GATGGTGTGATGAACATTTGCAACTCATCAGCCTTTGTGCAACTGTGATGCAGCAGTTATCTCAGAAATTGTTAA
CGTGAATATATCTGGAATGGGGGTTTGTAAATAATGAAGTTGTAATAAAAAATAAATGACCAAAAGCACC

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FIGURE 1330

CCTCCAACCACCTGCACGCCTGCCTGCCAGGGCCTCTCTGGGGCAGCCATGAAGTCCCTCGTCCTGCTCCTTTGT
CTTGCTCAGCTCTGGGGCTGCCACTCAGCCCCACATGGCCCAGGGCTGATTTATAGACAACCGAAGTCGCATGAT
CCAGAAACTGAGGAAGCAGCTCTGGTGGCTATAGACTACATCAATCAAAACCTTCCTTGGGGATACAAACACACC
TTGAACCAGATTGATGAAGTAAAGGTGTGGCCTCAGCAGCCCTCCGGAGAGCTGTTTGAGATTGAAATAGACACC
CTGGAAACCACCTGCCATGTGCTGGACCCACCCCTGTGGCAAGATGCAGCGTGAGGCAGCTGAAGGAGCATGCT
GTCGAAGGAGACTGTGATTTCCAGCTGTTGAAACTAGATGGCAAGTTTTCCGTGGTATACGCAAAATGTGATTCC
AGTCCAGACTCAGCCGAGGACGTGCGCAAGGTGTGCCAAGACTGCCCCCTGCTGGCCCGCTGAACGACACCAGG
GTGGTGCACGCCGCAAGCTGCCCTGGCCGCCTTCAACGCTCAGAACACGGCTCCAATTTTCAGCTGGAGGAA
ATTTCCCGGGCTCAGCTTGTCCTCCACCTTCTACCTATGTGGAGTTTACAGTCTCTGGCACTGACTGTGTT
GCTAAAGAGGCCACAGAGGCAGCCAAAGTGTAACTGTCTGGCAGAAAAGCAATATGGCTTTTGTAAAGCAACACTC
AGTGAGAAGCTTGGTGGGGCAGAGTTGCAGTGACCTGCACGCTGTTCCAAACACAGCCCGTGACCTCACAGCCC
CAACCAGAAGGTGCCAATGAAGCAGTCCCCACCCCGTGGTGGACCCAGATGCACCTCCGCTCCCTCCACTTGGC
GCACCTGGACTCCCTCCAGCTGGCTCACCCTCAGACTCCCATGTGTTACTGGCAGCTCCTCCAGGACACCAAGTTG
CACCGGGGCAGCTACGACCTGGCCACACCTTCATGGGTGTGGTCTCATTTGGGGTCACCTCAGGAGAAGTGTGG
CACCCCCGAAAAACAGCAGAGTGGTGCAGCCTAGTGTGTGTGCTGCTGCTGGGCCAGTGGTTCCCTCCATGTCCG
GGGAGGATCAGACACTTCAAGGCTAGCCTAGACATGGCAGAGATGAGGAGGTTTGGCACAGAAAACATAGCCAC
CATTTTGTCCAAGCTGGGCATGGGTGGGGGGCCTGTCTGCTGGCCACGCAAGTGTCAATGCGATCTACATTA
ATATCAAGTCTTGACTCCCTACTTCCCGCTCATTCCTCACAGGACAGAAACAGAGTGGGTGGTGGTTATGTTTGAC
AGAAGGCATTAGGTTGACAACTTGTATGATTTTGACGGTAAGCCACCATGATTGTGTTCTCTGCCTCTGGTTGA
CCTTACAAAACCATTGGAAGTGTGACTTTGAAAGGTGCTCTTGCTAAGCTTATATGTGCCTGTTAATGAAAGTG
CCTGAAGACCTTCCCTAATAAAGAGGTTCTAAGCTG

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FIGURE 1331

MKSLVLLCLLAQLWGCHSAPHGPGLIYRQPNCDDEPETEEAALVAIDYINQNLFWGYKHTLNQIDEVKVWPQQPSG
ELFEIETDLETTCHVLDPTPVARCSVRQLKEHAVEGDCDFQLLKLDGKFSVVYAKCDSSPDSEEDVRKVCQDCP
LLAPLNDTRVVHAAKAAALAFNAQNNGSNFQLEEISRAQLVPLPPSTYVEFTVSGTDCVAKATEAAKCNLLAEK
QYGFCATLSEKLGGAEVAVTCTVFQTPVTSQPQPEGANEAVPTPVVDPAAPPSPPLGAPGLPPAGSPDPSHVL
LAAPPQHQLHRAHYDLRHTFMGVVSLGSPSGEVSHPRKTRTVVQPSVGAAAGPVVPPCPGRIRHFKV

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FIGURE 1332

TTTCTTTAAGAGGAAGACGCGGTCGTAGGTGCGAGGATTTCTGGTCCGCATGCTCCTGCTCCTGACTCAGCGCTG
TTCGCTCTCGCCGCCGAGGAACAAGTCGGTCATGAAGCCGCGCAGCAGCCATGGCTTTTAAGGATACCGGAAAAAG
CACCCGTGGAGCCGGAGGTGGCAATTCACCGAATTCGAATCACCCCTAACAGCCGCGAGCGTAAAAATCCTTGGAAA
AGGTGGGTGCTGACTTGATCAGAGGCGCAAAAGCAAAGAATCTCAAAGTGAAGGAGGAGTTCGAATGCCTTCCA
AGACTTTGAGAATCACTACAAGAAAACTCCTTGTGGTGAAGGTTCTAAGACGTGGGATCGTTTCCAGATGAGAA
TTCACAAGCGACTCTTTGACTTGACAGTCCTTCTGAGATTGTTAAGCAGATTACTTCCATCAGTACTGAGCCAG
GAGTTGAGGTGGAAGTCACCATTGCAGATGCTTAAGTCAACTATTTTAATAAAATGATTACCAGTTGTT

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FIGURE 1333

GGAAAGACTATGTTT TAGGTGACCCGTGTGGCCTTTTGTGTAGGSCCTTTAGSATACAAGGCCCCACCTAAAGA
CGCGACCTCCCGTAGGAGGGGGGACAGGCGCCGGGGGGGGAGCACAGCGGGGCCAGCCTCAGGCGGCGCGTC
ACTGAGCACAAAGAGACAAACAGCGAGCGGCACGCGGGCGCTGATCTTCGCTCGCCAGCCACTCGCAATTTCGGGT
TACGAGACCTCGACCTCCCCCTCCCCAGCGGGCCGCGCCGCTTCTGTCTCCTCTCTCCCTCCGTACTGGACGG
CCCCGGTCCATTTCCGGGCTCCGGATATTGGTATCGATTGGGGCCGGGGACGCGGAGCAGGTGGCCGCGCGGG
GCAGCTGGGCGCGCAGCTTGGTGCTCGGGGACCGCTCTCCGCTGCTTTGCTACACAGCCCTGCCCGCCGACCC
CGCTCCGTTCTCGGCGCTGCGAGCCCTGCCGGCCGGACTTTGCGCCGCGCTCGGGCGCTGCTGCTGCGCTCGGGG
CCCGCTCGGCGCCGCGGTGACCGGGAAGCCCGCGTTAAAGGGGCAACCGGGAACCTGGCCCGGTATGCTGAAG
TCAGCATCGACCAAGTCCAAGCTGCTGGAGTCAAGGAAGTATGCCGAGATTTTGCTGTCTGGAGACCAACCC
TGGCTCACAGCCTGCGAGGAACAAGAGATTGAGCATCATTGGCATCGAACGTTACGCGGAACCGTTTGGTCCAGC
ATGATCTCCAGGTGGCTAAGCAGCTCCAAGAGGAAGATCTGAAAGCGCAGGCCCAGCTCCAGAAGCGCTACAAAG
ACCTTGAACACACAGACTGTGAAATTGCTCAGGAAATTCAGGAGAAGCTGGCTATTGAGGCAGAGAGACGACGCA
TTCAGGAGAAGAAGGATGAGGACATAGCTCGCCTTTTGCAAGAAAAGGAGTTACAGGAAGAGAAAAAGAGAAAGA
AACACTTTCCAGAGTTCCTGCAACCCGTGCTTATGCAGATAGTTACTATTATGAAGATGGAGGAATGAAGCCAA
GAGTGATGAAGAAGCTGTATCTACTCCATCACGAATGGCCACAGGGATCAGGAATGGTATGATGCTGAAATTG
CCAGAAAACCTGCAAGAAGAAAGAACTTTGGCTACCCAGGTGGACATGAGAGCCGCTCAAGTAGCTCAAGATGAAG
AAATCGCTCGACTTCTAATGGCTGAAGAAAAGAAAGCTTACAAAAAGCCAAAGGAGCGGGAGAAATCATCTTTGG
ACAAAAGAAAGCAAGACCCGAGTGGGAAGCCAAAAACAGCTAAAGCAGCAAAATTCCAAGTCAAAAAGAGAGTATG
AACCTCACCACTTCAAGAATGAAAGGCCAGCAGGCCACCAACCACTTATCATGACAGATGGTGAAGATGCGGATT
ACACTCATTTTTACAAACAGCAGAGTTCACACAGGCATTTCTCAAAATCAGAGTCCCTCATAAAGGTTTTCAIT
ACAAAACATTA~~TA~~AAACCTAGGAATCTGCGTTGAAATGGACTCACTATAGCAAAATATTACTGGGTGATACAGAATG
AATTCACACTTACTTTTTTCTCCTGTGTTGTCATTCTGGGATTTATCCTCAAGTGCAATTTCTGACCATAAGT
AATTTAATTCATTCAAAATGTTTGGTTATTCATGATCACTGGGCAGTATAAGAAAATGTAGCTTCTGAATAT
TGGCCACCTCTATGCTGCATATACTTCTTGGGATATAGTATCTAAGACCTTTGTAAACTGCCATTTTGTATAGTA
TGGAGTTTGGTATCTAGGGAGTAGGCCCTTATTAGCAATTCAAATTTTATGGAGATGAATGATCAAAAGTGAACA
ATGTTTGGATGCAACGCGAATAAAAAGAAATATAAGAAATAGCTTTTTGTTCGATTAATGTATGATATTTTGAAGG
ACAGAGCCTTTCGCTTTTGTATTCTTAAGAAAAGCACAAACCATAAAGATTTTAAAAAAGAAACACTTGGAGC
AATTGAAATATGTTATCTGACTAGATGGACTGTAGAGGTTTTGCATTTCTCAGCCCTCTGGGGAGATTGGCCT
AGATAGCACTTTTAAACCTTCCCTGCTTTTGCTCAGTAGCAGGCTTTCCTAAGCTCCTGGGCAATGGAACA
TTTATTAGTATTTATGACAAAAATTTAGTTCTCTGAAATTTTAACTCATATATGAAAAAATTTGTATTCCAT
CTCTCTTTTTCATTTACTTTGTAGAGCCCAAGGAATGGAATTGAAAGATGATTGCATAAGTAAATGATGACATCTCT
TCTCTCGGCTGTAGACTGAGGCTTTTCTCTTGCTCAAGTCAGAGCAGTATTTGTGTAAACCTCTCAATAATG
TTTGGTTTACATGCCAGTAATTAATAATTCAACATGAAGTTGAATTTGATGAAGTGGCTCATCTATCCAAATG
TTGGTTTTTGTGTTTTGTTTTGTTTTTGGAGTTGGAGCTCTGCGCTGTACACAGGCTGGAGTGCAGTGGTG
CAATCTTGGCTCACTGCAACCTCCGCCACCTGGGCTGGAGCAATTCCTCTGCTCAGCCTCCAAGTAGCTGGA
TTACAGCATGTGTACACACACCCGCGCTAATTTTGTATTTTATGTAAGAGCGGGTTTACCATTGTTGGCCAGG
CTGGTCTCGAACCCCTGACCTCAAGTGATCCACCTGC

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FIGURE 1334

MAEVSIDQSKLPGVKEVCRDFAVLEDHTLAHSLQEQEIEHHLASNVQRNRLVQHDLVAKQLQEEDLKAQAQLQK
RYKDLEQQDCEIAQEIQEKLAIEAERRRIQEKKDEDIARLLQEKELQEEKRRKKHFPEFPATRAYADSYYYEDGG
MKPRVMKEAVSTPSRMAHRDQEWYDAEIAARKLQEEELLATQVDMRAAQVAQDEEIAARLLMAEEKKAYKKAKEREK
SSLDKRKQDPEWKPKTAKAANSKSKESDEPHHSKNERPARPPPPIMTDGEDADYTHFTNQSSSTRHFSKSESSHK
GFHYKH

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FIGURE 1335A

CGTTGATATCAAAGACAGTTGAAGGAAATGAAATTTGAAACTTCACGGTGTGCCACCCTACAGTATGCCCTGAC
CCTTACATCCAGCGTTTCGTAGAAACCCAGCTCATTCTCTTGGAAAGAAAGTTATTACCGATCCACCATTGCC
CAGAGCACACAGACAAATGAATTCCTCAGTCCAGAGGTTTCCAGCATATCTGGGATTTCTGGAAACAGCCTATA
TGTTTCAGTTCAGCCATTGACTTGAACCTTTGTGGATGAACCATCAGAAGATGGTGCAGCAAAAGAAATGAGATT
AGCATGGACTGTATCCGCATCGAGGACTCGGACCTGAGTACGCCCATGTGGCCACGATACAGCAACCTTGGGGCTC
CTGAACAGCATGGACAGCAGCATTAGAACGGCTCCTCTGCCACCAGTCCCTATAACACAGACCAGCGCAGAAC
AGCGTCACGGCGCCCTCGCCATACGCACAGCCAGCTCCACCTTCGATGCTCTCTCTCCATCACC CGCCATCCCC
TCCAACACCGACTACCCAGGCCCGCACAGTTTCGACGTGTCTTCCAGCAGTCCGAGACC GCCAAGTCGGCCACC
TGGACGTATTCCTAGTAAGTGAAGAACTCTACTGCCAAATTGCAAAGACATGCCCATCCAGATCAAGGTGATG
ACCCCACTCTCTCAGGGAGCTGTTATCCGCGCCATGCCGTCTACAAAAAGACTGACAGCTGACGGAGTGGTG
AAGCGGTGCCCAACCATGAGCTGAGCCGTGAATTCACAGAGGGACAGATTGCCCTCTTAGTCATTGATTGCGA
GTAGAGGGGAAACGCCATGCCAGTATGTAGAAGATCCCATCACAGGAAGACAGAGTGTGCTGGTACCTTATGAG
CCACCCAGGTTGGCACTGAATTCACGACAGTCTTGTAACAATTCATGTGTACAGCAGTTGTTGTTGGAGGGATG
AACC CGCGTCCAATTTTAACTATTGTTACTCTGGAACACAGAGATGGCGAAGTCTGGGCCGACGCTGCTTTGAG
GCCCGGATCTGTGCTTGCACGAGGAAGACAGGAGGCGGATGAAGATAGCATCAGAAAGCAGCAAGTTTCGGAC
AGTACAAGAAACGGTGTGTTACGAAGCGCCGTTTCGTAGAACACACATGCTGATCAGATGACATCCATCAAG
AAACGAAGATCCCCAGATGATGAATCTGTATACCTTACCAGTGAGGGCGGTGAGACTTATGAAATGCTGTTGAAG
ATCAAGAGTCCCTGGAACCTAGCATGAGTACCTTCTCAGCACACAATTTGAACGTCACAGGCAACAGCAGCAG
CAGCACAGCACTTACTTCAGAAACAGACCTCAATACAGTCTCCATCTTCATATGGTAACAGCTCCCACTCTG
AACAAATGAACAGCATGAACAAGCTGCCTCTGTGAGCGAGCTTATCAACCTCAGCAGCGCAACGCCCTCACT
CTCAACAACATCTCTGATGGCATGGGAGCCAAACATTCCTATGATGGGCACCCACATGCCAATGGCTGGAGACATG
AATGGACTCAGCCCCACCAGGCACTCCCTCCCCCACTCTCCATGCCATCCACTCCGAGTGCACACCCCACT
CCGTATCCACAGATTGACAGTATGTGAGTTCTTAGCGAGGTTGGGCTGTTTATCATGTCTGGAGCTTCTCAG
ACCCAGGGGCTGACCACTATCTACAGATTGAGCACTTACATGGATGATCTGGCAAGTCTGAAATCCCTGAG
CAATTTGCAGATCGCATCTGGAAGGGCATCTCTGGACACC CGCGAGCTCCACGAATTTCTCTCCCTTCTCATCTC
CTGGGAGCCCAAGCAGTGGCTCTACAGTCAGTGTGGGCTCCAGTGAGACCGGGGTGAGCGGTGTTATTGATGCT
GTGCGATTCACTCTCCGCCAGACCATCTCTTTCCACCCCGAGATGAGTGGAAATGACTTCACTTTGACATGGAT
GCTCGCCGCAATAAGCAACAGCGCATCAAAGAGGAGGGGGAGTGAAGCCTCACCATTGAGCTCTTCTATCCCTC
TCTTAATCTGCCAGYCCCTAAAAGCACTCTCTGCTTAATCTTAACTGATTTTGGATGGCTTGTCTATACCTCTT
GTCTGATTTCTTAGGGGAAGGAGAAGTAAGAGGCTACCTCTTACCTAACTCTGACCTGGCATCTAAATCTGATT
CTGGCTTTAAGCCTTCAAAATCTATGCTTGCAGAACTGTAGCTGCCATGGCTAGGTAGAAGTAGGCAAAAAAGAG
TTGGGTGCTCTTAACTGTCAGAGATTTCTCATTGACTTTTATAAGCATGTTACCCCTTATAGTCTAAGACTA
TATATATAAATGTATAAATATACAGTATAGATTTTGGGTGGGGGGCATTGAGTATGTTTAAATGTAATTA
ATGAAGAAAAATTGAGTTGCACTTATTGACCAATTTTAACTTACTTGTTTGGATGGCTTGTCTATACCTCTC
CCTTAAGGGGTATCATGTATGGTGATAGGTATCTAGAGCTTAATGCTACATGTGAGTGCAGCATGATGTACAGATT
CTTTCAGTCTTTGGATTCTAAATACATGCCACATCAAACTTTGAGTAGACTTATTCGATTGCTTTATTGTA
GGTAAGACTGTAGATATGTATTCTTTCTCAGTGTGGTATATTTTATATTACTGACATTTCTCTTAGTGATGAT
GGTTCAGTTGGGGTGATTTAATCCAGTTATAAGAGAAGTTTCATGTCCAAAGCTCCTCTTAGTTTTTGGTTGG
GAATAGGAAAAATCTTAAAGGCCCATAGCAGCCAGTTCAAAAACCCGACGTCATGATTTGAGCATCTCAG
TAACCCCTTAAATTTAATACCGATACCTTATCTTACAATATTGATTGGGAAAAACATTTGCTGCCATTACAG
GTATTAATAACTAAATTTCACTAGTAGATTGACTAACTCAATACACATTTGCTACTGTTGTAGAAGATCTGATTG
ATTGATTGGGATGAATGCCATCTATCTAGTTCTAACAGTGAAGTTTACTGTCTATTAATATTACGGGTAATA
GGAATCATTCAGAAAGTTTGAGTCTGTACTAAACAGTAAGATATCTCAATGAACCAATAAATCAACTTTGTA
ATCTTTTGAAGCATAGATAAATTTGTTTGGTAAATGTTCTTTGTTGGTAAATGTTCTTTTAAAGACCTCC
TATTCTATAAACTCTGCATGTAGAGGCTGTGTTACCTTTCTCTCTTAAGGTTTACAATAGGAGTGGTGATTG
AAAAATATAAATATTAGAGATTGGTTTTCTGTGGCATAAATGCATCACTGTATCTTTCTTTTAAACCGGT
AAGAGTTTCAGTTTGTGGAAAGTAAGTGTGAGAACCCGATTTCCCGTCCATCTCCCTTAGGGACTACCCATAGA
CATGAAAGGTCCCAACAGAGCAAGAGATAAGTCTTTCATGGCTGCTGTGCTTAAACCACTTAAACGAGAGTTTC

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FIGURE 1335B

CCTTGAACCTTTGGGAAAACATGTTAATGACAATATCCAGATCTTTCAGAAATATAACACATTTTTTTCATGC
ATGCAAATGAGCTCTGAAATCTTCCCATGCATTCTGGTCAAGGGCTGTTCATTGCCACATAAGCTTCCATTTTAATT
TTAAAGTGCAAAAGGCCAGCGTGGCTCTAAAAGGTAATGTGTGGATTGCCCTTGAAAAGTGTGTATATATTTTG
TGTGAAATTCATACTTTGTATTTTGATTATTTTTTTTCTCTTGGGATAGTGGGATTTCAGAACCACTT
GAAACCTTTTTTATCGTTTTTGTATTTTCATGAAAATACCATTTAGTAAGAATACCACATCAAAATAAGAAATAA
TGCTACAATTTTAAGAGGGGAGGGAAGGGAAGTTTTTTTTTATTATTTTTTAAATTTTGTATGTTAAAGAGA
ATGAGTCCTTGATTTCAAAGTTTTGTTGTACTTAAATGGTAATAAGCACTGTAAACCTTCGCAACAAGCATGCAG
CTTTGCAAAACCATTAAAGGGGAAGATGAAGCTGTTCCCTTGGTCCTAGTAAGAAGACAACTGCTTCCCTTACT
TTGCTGAGGGTTTGAATAAACCTAGGACTTCCGAGCTATGTCTAGTACTATTAGGTAACACTAGGGCCTTGAAAA
TTCCCTGTACTGTGTCCTCATGGATTGGCACTAGCCAAAGCGAGGCACCCTTACTGGCTTACCTCCTCATGGCAGC
CTACTCTCCTTGAGTGTATGAGTAGCCAGGGTAAGGGGTAAGGATAGTAAGCATAGAAACCCTAGAAAGTGG
GCTTAATGGAGTCTTGTGGCCTCAGCTCAATGCAGTTAGCTGAAGAATTGAAAAGTTTTTGTTTGGAGACGTTT
ATAAACAGAAATGGAAGCAGAGTTTTTCATTAAATCCTTTTACCTTTTTTTTTTCTTGGTAATCCCTTAAATAA
CAGTATGTGGGATATTGAATGTTAAAGGGATATTTTTTCTATTATTTTATAATTGTACAAAATTAAAGCAAT
GTTAAAGTTTTTATATGCTTTTATAATGTTTTCAAAGGTATTATACATGTGATACATTTTTTAAGCTTCAGTTG
CTTGTCTTCTGGTACTTTCTGTTATGGGCTTTTGGGAGCCAGAAGCCAACTACAATCTCTTTTGTGGCCAG
GACATGCAATAAAATTTAAAAATAAATAAAACTAATTAAAGAAATAAA

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FIGURE 1336

MNFETSRCATLQYCPDPYIQRVETPAHFSWKESYYRSTMSQSTQTNEFLSPEVFQHIWDFLEQPICSVQPIDLN
FVDEPSEDGATNKIEISMDCIRMQSDSLSDPMWPQYTNLGLLNSMDQQIQNGSSSTSPYNTDHAQNSVTAPSPYA
QPSSTFDALSPSPAIPSNIDYGPGHSEFVSPQSSSTAKSATWTYSTELKKLYCQIAKTCPIQIKVMTPPPQGAVI
RAMPVYKKAHVTEVVVKRCPNHELSEFNEGQIAPPSHLIRVEGNSHAQYVEDPITGRQSVLVPEPPQVGTEFT
TVLYNFMCSNVCGGMNRRPI LIIVTLETRDQVLGRRCFEARICACPGRRKDEDSIRKQQVSDSTKNGDGTK
RPFQNTHTGIQMTSIKKRRSPDDELLYLPVRGRETYEMLLKIKESLELMQYLPQHTIETIRQQQQQHQLLQKQ
TSIQSPSSYGNSSPPLNKMNSMNKLPSVSQLINPQQRNALTPTTIPDGMGANIPMMGTHMPMAGDMNGLSP TQAL
PPPLSMPSTSQCPTPPPPYPTDCSIVSFLARLGCSSCLDYFTTQGLTTIYQIEHYSMDLASELKIPEQFRHAIWKG
ILDHROLHEFSSPSHLLRTPSSASTVSVGSSETRGERVIDAVRFTLRQTSIFPPRDEWDFNFDMDARRNKQQR I
KEEGE

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FIGURE 1337

CATTTTGCGAAGTTTAACCAACCGGGTACCGCGTTCTTGTCAACCACTGGTTTGTAAACAGTTGCGAGAAC
CTTCTCCTTCTTTTCTTTTCAACCTTGGATTTAGCGGCTGAGTACTTCTCTTGTACATGGCCTTCTTGGAATC
CATGGCAGATCGGGAATACCTGCCAATTCTCTGACAAGGACAGGGTTGCGGCTGCAATGGGGCTTCCCCTTGT
GGGCTTTTGTAGCTTTGAGGTTACCTTTTTCACCTTGCCACCAGCATCAACCTTCTTGGCTTCGGGTTTCTTCTC
TTTAG

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FIGURE 1338

ATGCCTGCTGCCACGTGGCTGGTCTCTCTCTCTGCTGTGGCTGAGCCTTGGGGTGAAGACAGCTTCTCAGATG
ACCAAGATGGTGTCTGCAGATGGTGTCTGAGGATGGAGAACCACCAAGCCCGCTAGGAGCCACCTAGACTGGATG
CAGAGCATGGAAATAAGCCTCGGTGTGGAGAGGGCCTGTCCTCAGGGCCTTGGCAGATGTAGGCGATTCTTACCAC
GTCTCCTTGCCTACCCCGAAAGGCCAATCATATGGCCTTTCTCGTCTTTTAAGGGTTTTACTTCCATGGGGAAC
TATGTGTGGATGAGAAAAGTATCCGGGAAGGGGACAGAGGTTCAGAAAAGCTCTGCGAGTCTGTGACGCTGGTC
TGCTTCTTGGCTACCCCTGGAAGGTGGACGCTGGCCCCACATCCCCCTCTTAAAGACCGAGGCCGATAGCCAG
CAGATCTCTGGGGCTTGCTGGCCCCAAGCAGACACTGCGATGACAACGGGACGACACAGAAGTGCCCGCTATGACT
CTAGCACCGGGCCACCGCGCTCTGGAACTCAAACGCTGAGCGCTGAGACCTCTTCTAGGGCCTCAACCCAGCC
GGCCCCATTCCAGAAGCAGAGACCGAGGGGACCAAGAGAATTTCCCTTGAAGAGAGACCAAGGATTTCAAAAA
ACATCTCCCAACTTCATGGTGCTGATCGCCACCTCCGTGGAGACATCAGCGCCAGTGGCAGCCCGAGGGGAGCT
GGAATGACCCAGTTTCAGACCATCAGAGCGATGATCCAGGGAAGCCATCTTTGACACCTTTTGACCGATGAC
AGCTCTGAAGAGGCAAGACACTCAATGGACATATTGACATTGGCTCACACCTCCACAGAAGCTAAGGGCCTG
TCTTCAGAGAGCAGCGCCTCTTCGACAGCCCCCATCCAGTCATCACCCTGTCAGGGCCTCAGAGAGCAGCGCC
TCTTCCGACGGCCCCCATCCAGTCATCACCCTGTCAGGGCCTCAGAGAGCAGCGCTCTTCCGACGGCCCCAT
CCAGTCATCACCCTGTCAGGGCCTCAGAGAGCAGCGCTCTTCCGACGGCCCCCATCCAGTCATCACCCTGTC
CGGGCCTCAGAGAGCAGCGCTCTTCCGACGGCCCCCATCCAGTCATCACCCTGTCAGGGCCTCAGAGAGCAGC
GCCTCTTCCGACGGCCCCCATCCAGTCATCACCCTGTCAGGGCCTCAGAGAGCAGCGCTCTTCCGACGGCCCC
CATCCAGTCATCACCCTGTCAGGGCCTCAGAGAGCAGCGCTCTTCCGACGGCCCCCATCCAGTCATCACCCTG
TCACGGGCTCAGAGAGCAGCGCTCTTCCGACGGCCCCCATCCAGTCATCACCCTGTCAGGGCCTCAGAGAGC
AGCGCTCTTCCGACGGCTCCATCCAGTCATCACCCTGTCAGGGCCTCAGAGAGCAGCGCTCTTCCGACGGC
CCCCATCCAGTCATCACCCTGTCAGGGCCTCAGAGAGCAGCGCTCTTCCGACGGCCCCCATCCAGTCATCACC
CCTCATGGTCCCGGATCTGACGTCATCTCTCGTGAAGCCCTGGTGACTGTCAAAACATCGAGGTATT
AATTGACGATCAGAAATAGAAAACAGACTTCAGATCCCTGGGGCCTCAGACAGATCTATCCCCACG
GAAGGGGTGAAGGCTCGTCCACCTCCGATCCACAGCTCTGCTGACTCCACTGAAGCAAAACCAATCATCAT
GAGGTCACAGCTCTGCCGAGACCTGTCCACAGCCGGCACCACAGAGTCAGCTGCACCTGATGCCACGGTTGGG
ACCCACTCCCCACTAACAGCGCCACAGAAAAGAGAAGTGACAGCACCCGGGGCCACGACCTCAGTGGAGCTCTG
GTCACAGTTAGCAGGAATCCCTTGAAGAACTCAGCCCTCTCTGTTGAGACACCAAGTTACGTCAAAGTCTCA
GGAGCAGCTCCGCTCTCCATAGAGGCTGGGTACGAGTGGGCAAAACAATCTCTTGTGGGAGCTCTGCTTCC
TCTTACAGCCCCTCGGAAGCGCCCTCAGAACTTACCCCCCTCAGAGACCCGACCATGGACATCGCAACCAAG
GGGCCCCCTCCCAACAGCAGGGACCTCTTCTTCTGTCCCTCCGACTACAACCAACAGAGCCGAGGGAGCAAC
AGCACCTTAGCCAAAGATCACAACTCAGCGAAGACCAAGATGAAGCCCCCAACAGCCACCGCACTGCCCG
ACGAGGCCGACACAGAGCTGAGTGCAGGTGAAAATGGAGGTTTCTCTCTCTGCGGCTGAGTGTGGCTCCCCG
GAAGACCTCACTGACCCAGAGTGGCAGAAAGGCTGATGCAGCAGGAGAGGCTAACCGACATCGACTGCAGCCAG
GCATGTCCCGTATGCCAAAAGAGGGTGCTGCCCTAGCCTGGGCCCCCACCAGACAGCTGCAGCTGCGTTACTGT
GCTGAGAGGTACCCAGAAGGTTCCCATGAAGGGCAGCATGTCCAAGCCCTGACCCACAGATGTGGCAACAGGACC
CTCGCTCACTCCACCGGAGTTTGTTCATTGTACGTTGACGTCTCGAGGACAAGCAGCCGCTAGTATTACCTCTGT
ATCAGAGAAGCTGGCGTGGAGCCCTCCACATGA

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FIGURE 1339

MTDDTEVPAMTLAPGHALETQTLAETSSRASTPAGPIPEAETRGAKRISPARETRSFRTKISPNFMVLIATSV
ETSAAGSPEGAGMITVQITITGSDPREAIFDTLCTDDISEAKTLTMDILTLAHTSTEAKGLSSESSASSDGPHP
VITPSRAESSASSDGLHPVITPSRAESSASSDGLHPVITPSRAESSASSDGPHPVITPSWSPGSDVILLAEA
LVTVTNIEVINCISITEIETTSSIPGASDIDLIPTEGVKASSTSDPPALPDSTNTKPHITEVTASAETLSTAGTT
ESAAPDATIGTPLPTNSTIEREVTAPGATTLSGALATGNPLEETSALSVEFPSYVKVSGAAPVSIEAGSAVGKTT
SFAGSSASSYSPLEAALKNFTPSETLTTDIATKGPFPTSRAPLPSVPPTTTNSS

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FIGURE 1340A

ACGCCACCCCTCTTCTGTCAACGACCTTCTCTCAGTATCCACAGGTCACGCCACCCCTCTTGCTGTCAAGCTG
CTACCTCAGCTTCCACAGTATCTTCGGACTCCCTCTGAAGATGGAAACACAGGAATGACAAACCCGTCAGTGA
AGACAGACGGTGGGAGACGACAGCCACATACACCCCCCCACAACTCCCGAGCCATCATTTCCACCATTTCCCA
GCATCGCATGTGCACACCCGCTCCACAGCTGCCCCCATCCCATCTCTGCCTGAGAGAGGAGTTCCTCTTCCCTCT
ATTGGGGCGACGCCGGGGAACCTGGAGTTCGTACAGGAGGACCGTGACTTCACCTCCCCACTCTCAAGCCGGGGA
CTGGCTTCCCTTGGCTCCTCTCTCGTGATTCCTCTACTTCACAGACAAATGGCCAGATCATCTTCCAGAGAT
CAGACTACAGATTTTCTCTACCCCAACCCACTCCCAACAGGCTTCACAGGCCGGGACCTGTGGCCCTGGTG
CTCCGTTCTGGGACGATGCTGACTTCTCCACTGGTCGGGGGACCACATTTATCAGGAATACGAGACGTTCTATG
GTGAACACAGCCTGCTAGTCCAGCAGGCCGAGTCTTGGATTAGAAGATGACAAACACGGGGGCTACAAAGGCCA
GGTGGGCCCTAAAGGTCACGTGGGTCAATGCCACGCCATCTCTGCCAGTGGACCTCGGGAGCAACACCTACC
AAGCCATCCTCTCCACGGAGCGGAGCAGGTCTCTATGCCCTGTCTTCTACAGAGCCGTGGGATGCATGGGACG
TGGCCACGGCCTCAGCAACCCGGTGCTCATGGCTTCTCTAGTGAGATGGCTATTTCGAAAAACAGCCCACTGA
TGTCCCAGCCAGTGTGGGAGAGGTATCGCCCTGATAGATTCTGAATTCACACTCAGSCCTCCAAGGGCTGCAGT
TCTACAGGCTACACGGGAAGAAGGCCAACTACCGTCTCGAGTGCTGCAGTGGCTGAAGAGCCACGCTCGGT
GGCCAGCTGGGGCTGGAACAGGCTCTCTGCCCTTGTTCTGGCAGCAGGACGACGAGGACTTACGATTTCCAAAC
CCGTCAGCATAGGTTCGCTGGGGCTCGGGCAGTATGGCAGCTGTGCAGCTTCACCTCTTGGCGAGGAGCGGTGTGCT
CGAGTACGGGCCCTGGGAGAGATTTCGTGAAGGCTGGCAGCTGCAGCGCTCTTGGCAGTTGGCCCGAGGAACGTGG
AGCCACAGAGCTGGTGCTGCCGTGGAATGACAAAGCCCTACCTCTGTGCCCTGTACAGCAGAGGCCGCCCCACG
TGGGCTGTGCTACATACAGGCCCCCAACAGCCCGCTGGATGTTGGGGGACCCCACTACCACTCTGGATGGTG
TCAGTTACACCTTCAATGGGCTGGGGACTTCTCTGTGGTGGGGGCCAAGACGGGAACCTCTCTCTCTGCTT
AGGGCCCGACCCGCGCAGACTGGCTCAGCCAGGCCACCAACTCTACGCTTTTGGGCTCAGTACCGCTCCAGCA
GCTGGGCCCGCTCAGGCTCCAATGGCTCCTTGAGCCTCAGCAGCAATCCGTGTCTGTGATTAACAGCAGTGTG
TGACATTTACGCTTGACATGAAGCAGCGCGGAGGCCAGGAGACGTTCAACGCCACCGGAGTCTCTCTGAGGCCGA
ACGGCTCTGAGGTCTCGGCCAGCTTCSACGGCTGGGCCACGCTCTCGGTGATCGGCTCTCTCAACATCTCTCAG
CCTCGCCAGCCTCCCGCCCGAGTACCAGAACCGCAGCGAGGGGCTCCTGGGGTCTGGAATAACAATCCAGAGG
ACGACTTCAGGATGCCCAATGGCTCCACCATTTCCCCAGGGAGCCCTGAGGAGATGCTTTTCCACTTTGGAATGA
CTTGGCATGCAACGGGACAGGCTCCTTGGCAAGAGGAATGACCAGCTGCCCTCCAACCTTACCCCTGTTTCT
ACTCACAACTGCAAAAAACAGCTCTCGGCTGAACATTTGATCTCCAACCTGTGACGGAGATAGCTCATGCACT
ATGACACCCCTGGCCCTGCGCAACGCAAGCATCGGACTTCACAGAGGGAAGTCAGTAAAACTACGAGCAGGGCA
ACGCCACCTCAATCAGTACCCCGGCTCCATCAATGGTGGTCTGTGATTGAAGCTTACAAGGGCGACAGCCACGC
TGATTCAGTACACGACGATGCTGAGGATGCCAACTTCACGCTACGACAGCTGCACCCGACTTGGAGCTTTTG
AGAATGGGACGTTGTCTGTGGACACCCAACTCGCTGGAGCCATTCATCTGGAGATTCTAGCAAGAAGTGGCAAGA
TTGGCTTGGCATCTGCATCTCAGCCAGGACTGTGGTCTGCGATTGCAATGACAGAGAGCGTGTGTTGCAATC
AGACCAAGCGGGTGGGCAACTCTCCTTGGAGGTGGCTGGCTGCAAGTGTGACGGGGGCACCTTCGGCCGCTACT
CGAGAGGCTCCGAGGATGCTGTGAGGAGCCGTGCTTCCGAGTGTCCACTGCTTCTGGGAGGGCTGCGAGG
CTCGCTCTCCAACCTGACTCGGGATGGCGGCCAGTGTGCGCCTTGGGAGGCTTCTCTGTGTGCAAGCAAGT
CCTGCCCTGTGAATTACTGTCTACAATCAAGGCCACTGTCTACATCTCCAGACTCTGGGCTGTGAGCCATGTGCA
CCTGCCCTGACGCTTCACTGACAGCCGCTGCTTCTGGCTGGGAACAACTTCAGTCCAACCTGCAACCTAGAAC
TTCCCTTAAGAGTCATCCAGCTCTTGTCTCAGTGAAGAGGAAATGGCTCATGGCTACAGCCCGCAGAGCGGCTT
CATACAGACTGGGGACCTTGACATCGCGGCTTCTTCCGCAACAGCCAAAGTGAACGAATGATTCTGCAGCAGC
CGGCTCTGGGAAGGCCCATCCAACTAGATGGTGCATCTCGGAGTTCAGTACGCCCTCGGGGCCGGCTCATTTG
ACTTCTTGAACAAACAGCTGCTGGCCGCGGTGGTGGAGCGCTTCTTATACCACTTCCAGGAGGAGTGGAGAGC
CCAGGAACGACGCTGGTCTTCCAGCCATCTCCGGGGAAGAGCTGCGCGATGTGACAGCCCTGAACGTGAGCAGC
TGAAGGCTTACTTACAGTGCATGCTGCTACAGGGCTACGACTGGCTACAGCCCGCAGAGCGGCTTACGCTGG
TGTCCCGTGCAGTGAAGGGCTACTGTGACCATGGAGGCCAGTGCACGACACTGCCAGTGGGCGCCGCTGCAGCT
GTGTGCTCTCTCATCTACACGGCTGGGGGAGCACTGTGACCACTGAGCATGAACCTGCAGCGGCTCTTTCG
GCATCTTCTTTGGGGCCCTGGGCGGCCCTTGTGCTGGGGGTGGGACGTTCTGTGCTCTGCGCTTCTGGGGTT
GCTCCGGGGCGAGGTTCTCTATTCTTGAACCTCAGCTGAGGCTTGCCTGAAGGGGCGAGCTGTGGCTTAGGCT

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FIGURE 1340B

ACCTCAAGACTCACCTCATCCTTACCGCACATTTAAGGCGCCATTGCITTTGGGAGACTGGAAAAGGGAAGGTGA
CTGAAGGCTGTCAGGATTCTT

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FIGURE 1341

AGTTCTGTGGAGCAGCGGTGCGCGGCTAGGATGGGCTGTCTCTGGGGTCTGGCTCTGCCCTTTTCTTCTCTGC
TGGGAGGTGGGGTCTCTGGGAGCTCTGCAGGCCCCAGCACCCGCAGAGCAGACACTGCGATGACAACGGACGAC
ACAGAACTGCCCGCTAIGACTCTAGCACCGGGCCACGCCGCTCTGGAACTCAAACGCTGAGCGCTGAGACCTCT
TCTAGGGCTCAACCCAGCCGGCCCCATTCCAGAAGCAGAGACCAGGGGAGCCAAGAGAATTTCCCCTGCAAGA
GAGACCAGGAGTTTACAAAAACATCTCCCAACTTCATGGTGTCTGATCGCCACCTCCGTGGAGACATCAGCCGCC
AGTGGCAGCCCCGAGGGGAGCTGGAATGACCACAGTTCAGACCATCACAGGCAGTGATCCCGAGGAAGCCATCTTT
GACACCTTTGCACCGATGACAGCTCTGAAGAGGCCAAGACACTACAATGGACATATTGACATTGGCTCACACC
TCCACAGAAGCTAAGGGCTGTCTTCAGAGAGCAGTGCCCTCTCCGACGGCCCCATCCAGTCATACCCCGTCA
CGGGCTCAGAGAGCAGCGCTCTTCGACGGCCCCCATCCAGTCATACCCCGTCACGGGCTCAGAGAGCAGC
GCCTCTTCGACGGCCCCATCCAGTCATACCCCGTCACGGGCTCAGAGAGCAGCGCTCTTCGACGGCCCC
CATCCAGTCATACCCCGTCATGGTCCCGGGATCTGATGTCACTCTCCTCGCTGAAGCCCCCTGGTGACTGTCA
AAACATCGAGGTTATTAATTGCAGCATCAGAAATAGAAACAACAACCTCCAGCATCCCTGGGGCTCAGACAT
AGATCTCATCCCCACGGAAGGGGTGAAGGCCTCGTCCACCTCCGATCCACGAGCTGTGCTGACTCCACTGAAGC
AAAACCAACATCACTGAGGTCAAGCCTCTGCCGAGACCTGTCTCAGCCCTCTCTGTTGAGACCAAGTTA
CGTCAAAGTCTCAGGAGCAGCTCCGGTCTCCATAGAGGCTGGGTGAGCAGTGGGCAAAACAACCTTCTTTGCTGG
GAGCTCTGCTTCTCTACAGCCCCCTGGAAGCCGCCCTCAAGAACTTCAACCTTCAGAGACACCGACCATGGA
CATCGCAACCAAGGGGCCCTTCCCAACGACGAGGACCTCTTCTTCTGTCTCCTCCGACTACAACCAACAGCAG
CCGAGGGACGAACAGCACCTTAGCCAAGATCACAACCTCAGCGAAGACCAGATGAAGCCCCCAACAGCCACGCC
CAGCATGCCCCGACGAGGCCGACCACAGACGTGAGTGACGGTGAATGGAGGTTTCTCTCTCTCGGCTGAG
TGTGGCTTCCCAGGAGCCTCACTGACCCAGAGTGGCAGAAAGGCTGATGACAGCAGCTCCACCGGAACTCCA
CGCCACCGGCCCTCACTTCCAGGTTCTCTTACTGCGTGTGAGGAGGCTAACGGACATCAGCTGCAGCCAGGCA
TGTCCTGATGCCAAAAGAGGTGCTGCCCTAGCCTGGGCCCCACCGACAGACTGCAGCTGCGTTACTGTGCT
GAGAGGTACCCAGAAAGTTCCCATGAAGGSCAGCATGTCCAAGCCCTTAACCCAGATGTGGCAACAGGACCCCT
GCTCACATCCACGGAGTGTATGTATGSGGAGGGGCTTCACTGTTCAGGAGGTGTCTTGGACTCACTTGGC
ACATGTTCTGTGTTTCACTAAAGAGACCTGATCACCATCTGTGTGCTTCATCCTGCATTAATAAATCACTCA
GTGTGCCCAAG

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FIGURE 1342

MGCLWGLALPLFFFCWEVGVSGSSAGPSTRRADTAMTDDTEVPAMTLAPGHAALETQTLAETSSRASTPAGPI
PEAETRGAKRISPARETRSF TKTSPNFMVLIATSVETSAASGSPEGAGMTTVQTTITGSDPEEAIFDTLCDDSSSE
EAKTLTMDILT LAHTSTEA KGLSSESSASD GPHPVITPSRASESSASD GPHPVITPSRASESSASD GPHPVI
TPSRASESSASD GPHPVITPSWSPGSDVTL LAEALVTVTNIEVINC SITEIETTSSIPGASDIDLIPTEGVKA
SSTSDPPALPDSTEAKPHITEVTASAE TLSTAGTTESAAPHATVGTPLPTNSATEREVTAPGATTL SGALVTVSR
NPLEETSALS VETPSYVKVSGAAPVSI EAGSAVGKITSFAGSSASSYSPSEAALKNFTPSETPTMDIATKGPFPT
SRDPLPSVPPTITNSSRG TNS TLAKITTS AKTTMKPPTATPTTARTRPITTDVSAGENG GFLLLRLSVASPEDLTD
PRVAERLMQQLHRELH AHAPHFQVSLLRVRRG

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FIGURE 1343

GGGCGGCACTGGACCAGGGATGAGAGTGGGTGCCGGGACTCGCCTATACTGCCGTGGGGGTGCAGGCCGCACTCC
TCACATATAGTCAAAATGACATATGCGTGCTTCCAGGGGCCCGGAGAGGACTCCATGGGGAGGGATGCTTACCTTT
GTGGGCTTTGGAAATATAAGCCCTTTCACTTCTCCGCTGGTCTCCACACGTTGGCAAGGCGAGGTATTGTGACCC
TGTTTTCCTCAGGTGAGGACATGAGGCGTGGGAGGGGTCTAGAGACTGGCCTGGCTAGTAGAGGCTGAGTCAGGA
TTTGAACCCAGCATATCTGACCCCAAGAGCCGCTGTGGGGGCGCACAGCGGAGCTGCAACCAGGCTCTTGAC
TCTTGCTCGTCATTCCCTGAGGTCCACAGGACAACAGCTGGGGACCTGGAGCCCCATCTGACGCTCTGGGGA
GAGGTGCTAGGCCCTTTTGGGTCTATGAGCTACTTTTGGGCCAGTGGAGCCGGGTAAAGACCATCTCAAAACCT
GTGCCAGGGGAGGTGACAGTCCAAGAGCGCCACCTTTGGGCTTCAGCTGTGTGGGCTGCACCAAGAAGGCTCAG
AGAATTAGGGGGTTCGTATTGATCCTTTTCTTCCAAGACTGGGATTACAGATAAAACACAGGGCATCCAGTT
ACATTTGAATTTCAAGTAACAATTTTTTTTAAAGTGAAGTACGTAGCCAATATTGCATGAGAAATACTACTGCT
AAAAAGTTATTTCGTCAATTTATCTGAATGCGAGTTCAAAATTAACCGAGTACCTGTATTTTTATTGCTAAATC
TAGAAACCTCTCCAAGAGACTCCTTGGCCCACTCACAGGGAGAGCCGATCTCCCTCTAGACAGGGGAGGGCCCC
CTTTCTCAGGCCAGAAAAGATCTTTGATAAACTACTCAAGAGGCTGAGGCGAGGAGATCGCTTGAGGCCAGGAA
TTCAAGACCTGCCGTGGCAACAGAGCAAGACCTGTCTTAGGGAAGATATCCTACCGTAGGCTCCCTCGGGGAC
TCCATTCTCTCCCACTCAGGGCCAGTCAAGGGAACAGGCTCTGCTCTGGGCGAAGTGC CGCGACCGCTCTC
TGAAAGCTAGGTGTGCTCTCAGGGGCTCCCGGTGCTCTGTGGAAATGCTGCGCCACGGTTTCCATGGTTCCCA
GGCTCAACCTCTCGAGTTCTCGGCCCTCATTACGAGGGGCGCTCGGCAGGGTGCGGGGTGCGCTTTTCCCTTGC
CGGAGCCCCAAGACTCTCGCCGCTCTCGCTTTGGCAGCAGCACTCGGACCTGTGCTCTGAGAGTCTCCCCG
CCTCAATCCACCCAGCTACCCCGAAAGGCACAATCATAGGCCTTTCTCGTCTTTTAAAGGTTTTTACTTCCATG
GGGAACATATGTGTTGGAATGAGAAAAGTACCCGGGGAAGCGCAGAGGTTCCAGAAAGCTCTGCGAGTCTCGGAGC
CTGGTCTGCCCTTTCTGGCTCACCTCTGGAAGGTGAGCGCTGGCCCAACATCTCAGGCTTTAAAGACGCGAGGCCAT
AGCCAGCAGATCCTGGGGCTTGCTGGCCCAAGTGAGTTGTACAGGGTTTACAGGAGCGCCAGTCAATGGCAACCC
AGCTCCATGGCTGCCACACAGGCCTGGGCTTCCAGGACTGCCCTCCTTCTTCTGCTTATGTAGATGAAAATG
AGGTAACGGCACTCCCTGCCCCACCCCTCCTCCGAGAAGTGCCCAAGGTTGAAATGCAATAGCTTGTGTGAAGTC
CACTGGAACCCAGGCTCACCAAGTCAGTCTTAACCAACACAGGCCCGAGCACCCGAGAGCAGACATCGCATGA
CAACGGCAGCAGACAGAAGTGCCCGCTATGACTCTAGCACCGGGCCACGCGCTCTGGAAACTCAAAACGCTGAGCG
CTGAGACCTCTTTAGGGCTCAACCCACAGCCGGCCCCATTCCAGAAGCAGAGACCAGGGGAGCCAAAGAAAT
CCCTGCAAGAGAGACCGAGAGTTTCAAAAAACATCTCCCACTTCATGGTGCTGATCGCCACCTCCGTGGAGA
CATCAGCCGCCAGTGGCAGCCCCGAGGGAGCTGGAATGACCACAGTTGACACCATCAGCCAGTATGCTCCGAGG
AAGCCATCTTTGACACCTTTGACCCGATGACAGCTCTGAAGAGGCAAGACACTCACAATGGACATATTGACAT
TGCTCTACACTCTCACAGAGCTTCAAGGCGCTGTCTCTCAGAGAGCAGTGCTCTCTCAGAGCGGCCCATGAGCTCA
TCACCCCGTCACGGGCTCAGAGAGCAGCGCTCTTCCGACGGCCCCATCCAGTCAACCCCGTCACGGGCTC
CAGAGAGCAGCGGCTCTTCGACGGGCCCCATCCAGTCATACCCCGTCACGGGCTCAGAGAGCAGCGCTCTT
CCGCGGCCCCCATTCAGTCAACCCCGTCACGGGCTCAGAGAGCAGTGCTGCTCTTCCGACGGGCCCATCCAG
TCATACCCCGTACGGGCTCAGAGAGCAGCGCTCTTCCGACGGGCCCATTCAGTCAACCCCGTCATGAGT
CCCGGGATCTGATGTCACTCTCTCGCTGAAGCCCTGGTGACTGTCACAAACATCAGAGGTATTAAATGGAGC
ATCACAGAAATAGAAACAACAATTCAGCATCCTTGGGGCTCAGACATAGATCTCATCCCCAGGAAGGGGTG
AAGGCTCTGCTCACTTCGATCAACAGCTCTGCTGACTCCACTGAAGCAAAACACACATCACTGAGGTGACA
GCCTCTCCGAGACCCCTGTCCACAGCGGCACCAACAGAGTCAGCTGCACTCATGCCACGTTGGGACCACTC
CCCATTAACAGCGCCACAGAAGAGAGTGACAGCACCCGGGGCCACGACCTCAGTGGAGCTCTGGTACAGTT
ACGAGGAATCCCCTGGAAGAAACCTCAGCCCTCTCTGTTGAGACACCAAGTACTGCTCAAAGTCTCAGGAGAGCT
CCGGTCTCCATAGAGGCTGGGTACGAGTGGGCAAAACAACATCTTGTGTGGGAGCTCTGCTTCTCTTACAGC
CCCTCGGAAGCGGCCCTCAAGAACTTCAACCTCTCAGAGACCGACCATGGACATCGCAACCAAGGGGCCCTTC
CCCAACGACAGGAGACCTCTTCTTCTGTCTCCGACTCAACCAACAGCAGCGAGGACGACAGACCTTA
GCCAAGATCAACACCTCAGCGAAGACCAGATGAAGCCCATCTCTACTAAAAATACAAAATTAGCTGGGTGTG
GTGGCATGCACCTGTAGTCCAGCTACTCGGGAGGTTGAGGCAGGAGAACTCACTTGACCAGGGAGGTGGAGGTT
GCAGTGAGCGAGATTGCGCCACTGCACTCCAGCTCGGCGCAACAGAGCAAG

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FIGURE 1344

CTTTTGAGCAGGAGTCCGGGCCCTCGTGTCACCGCTCTGAAGTCAAGGAGAGGCTGGGAGGCGGCAGAAATGCAGC
CAGAGGAGGGCACAGGCTGGCTGCTGGAGCTGCTGTCCGAGGTGCAGCTGCAACAGTACTTCCTGCGGCTCCGAG
ATGACCTCAACGTCAACCGCTGTCCCACTTTGAGTACGTCAAGAAATGAGGACCTGGAGAAGATCGGCATGGGT
GGCCTGGCCAGCGCGGCTGTGGGAGGCTGTGAAGAGGAGGAAGGCCCTGTGCAAAACGCAAGTCGTGGATGAGTA
AGGTGTTCAGTGGAAAAGCGACTGGAGGCTGAGTTCACCTCATCACTCTCAGAGCACCTTCGGAAAGACCTCGC
CCGCCCTGGGGGCCAGCAGGGGAGGGGCCCTGCAGAGCCTCACTGTCCTATTGGGGAGAAGGACCTGCGCC
TCCTGGAGAAGCTGGGTGATGGTTCCTTGGCTGGTGCGCAGGGGCGAGTGGGACGCGCCCTCAGGGAAGACGG
TGAGTGTGGCTGTGAAGTGCTGAAGCCGATGTCCTGAGCCAGCCAGAAGCCATGGACGACTTCATCCGGGAGG
TCAATGCCATGCACTCGCTCGACCACCGAAACCTCATCCGCTCTACGGGGTGGTGCTCACGCCGCCATGAAGA
TGGCATCAGTTTCCCAAATTGCCTCGAGGGAGAGGCTTGAGAACTGCAGGACTCCTAGAGGTCCCCAGACAGCA
GGCCAGGAAGGTGACAGAGCTGGCACCTCTGGGATCGTTGTTGGACCGGCTACGTAAGCACCAGGGCCACTTCCT
CCTGGGACTCTGAGCGCTACGCTGTGCAAGTGGCTGAGGGCATGGGCTACCTGAGTCCAAGCGCTTTATTCA
CCGTGACCTGGCTGCCGCAATCTGCTGTTGGCTACCGCGACCTGGTCAAGATCGGGGACTTTGGGCTGATGCG
AGCACTACCTCAGAATGACGACATTACGTCATGCAGGAACATCGCAAGGTGCCCTTCGCTGGTGTGCCCCGCA
GAGCCTGAAGACACGCACCTTCTCCCATGCCAGCGAC

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FIGURE 1345

TGTCCTTCAGTGAAATGATACCGGTCCCCACTGCCAGCTCACCTCCCGGGGCTGCAGGAGGCACCGGAGATAATG
GCTGTAGAGGGTCTTGTAACCTGAACATTGCTTGCAACATAAGGAATTCTAGTTACTGGGAGGAAGCACAGGGC
AGAGGCCAGAAGAGGCCCTCAGATTTGAGGCACCCCTAGCCAGACGGATAAGGATCCACCAGCTCTGGGGGCGTG
AGACCCAAGCTGGCAAGAATCTGCNACTGGAGCCAAGGCTGTGGGTGCCCTCAGTGGAGGCCGAGTCAGACCGAC
GTGGCCAGCTTTGACCCTCATGGCTCCTTTCTTCTGTGCCCTTGACCTTCGGCTCCTCCTGTGCCACCTGGCCT
CCGAGTCTCCTCCACTTTTCTTCCGCTCTCAGCCCTCAGCTCTAGGCGCCCTCCAGAGACCCAGCTGTCTTCCC
AGGCCCTTCCAGCAAGGACTAGCTTTCATCTGAACCACACACACTCACGGTTCAACCTCAGACTAAATTTAT
CCTCTCCCTGGGCAGGATGAAGGGCAGCCGACTCCTGGTGAGGGTGGAGACAGACAGCACCAATGGTCAGGC
CAGAGAAAGGGCCAGGGCTAAAAATGGACAAGGAGGTGTCTGTGAGGGGCCCTGCGGCTCCATCGATGCGGGT
AGGGCTGGAGTCTGCGGGGTGGCGGGTGCAGGAAGGGAGGGTGGGGCAGGACTGGGAGGAGACTCCGACCTTGGC
TGGGCGGTGCCCTCCTCTCCACACAGCTGGGTGTGGGGCCGCTCAGCCACAGGCTGCATGCCTGTCGGTCTCTT
TCTGGCACCTCCTTGAGGCCAGCATCAGGCTTTGGGTTTATGTTTGGGGGTGTGCCCTGGACGGAGTGTGGGCC
TCCAGCCAGGCTGCCCCACTGACAGTTTGGCAAAACCAGGACCTATCTGGAAGCCGAAGCCGGGATCACCAGGT
GGACCCAGCGGGGTGGGACTGAGTGACTGACCTGACCTGGGGTGTGGATTCCATCTGGCCCCCGGCTGCCTTCAACA
GGTGTTCAGTGGAAGGCACTGGAGGCTGAGTTCCACCTCATCACTCTCAGAGCACCTTCCGGAAGACCTCGCC
CGCCCTGGGGGCCAGCAGGGGAGGGGCCCTGCAGAGCCTCACCTCCTCATTGGGGAGAAGGACCTGCGCCT
CCTGGAGAAGCTGGGTATGGTTCTTTGGCGTGGTGCAGGGGCGAGTGGGACGCGCCCTCAGGGAAGACGGT
GAGCTCTCTGTGCTCTGCCAGGCGCAGCAGGCGATGGGACCCGGGGCTGGTAGTGGCTTCTTGCCTCCCAACAG
GGTGTGGATGGGACTGGGGATGCGTCACAGTGTGGCTATCCAGAGTCCGTGCTCAGGATTTTGGGGTTTTAT
TTATTTATTTATTTTGGAGATGGAGTCTGCTCTGTGCCCCAGGCTGGAGTGAGTAGGCACGATCTCGGCTTCC
TGCAACCTCCACTTTCCGGTTCAAGCAATCCTCTGCTCAGCCTCCTGAGTAGCTGGGATTACAGGCATGCAC
CACCACACTCAGTTAATTTTTGTATTTTGTAGTAGAGCGGGTTTCCACATGTTGGCCAGGCTGGTCTCGAAGCTC
CTGACCTCAGATGATCTGCCACTTTAGCCTCCCAAGTGCTTGGATTACAGGTGTGAGCCACCACTCCAGCCC
ATGCTCAGGTTTAACTAAGCAGATTTATTATTCAACTATAAAATAATTTATTATAAAAGTTTGGAAAGTATTT

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FIGURE 1346

MRVRAGVCGVAGAGREGGAGLGGDSDLGWAVPSLSTQLGVGPLSHRLHACRSLSGTLLEASIRLWVHVWGCALDG
VWASSQAAPLTVWQNQDLSGSRSGSPGGPSGVGLSD

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FIGURE 1347

CATCCTCCAGAGAAGGGGCCGAATCGCCGAAGGGCACTGCTTCGCCGATTAAAAAACAAAGCAAAAAGCCCC
GCATCTGCATCAGGAAGGGCGCCTCTGCCTACTCTGGGAGAGAGAAGGGCAACCCCTCCCCCTTGTACGTAGTCGT
CTGGGAGGCACAACCGTGGAAACGGGAGCCGCCACCAACCACCACCGCTCAAACCTCTCGGCCACTGGCTGGGGTA
CAGGGAGCGGCTGCGAGCGAATGGGATAAGCGAGCCTCCAGTTCCCGCTCTCCAGAGCAAGTGGCTTCAGTGAT
ATCCAAGCGCCCTTCAGCAGCCCAATTCCTGCCTCGCCAGCAGGCACCGGGGCCCACTTGGCGTTTGGCGGATTT
CAGCTGAATGGGAGGCGACACAATGAGACAAGAGCAAACCGTTTCTCAGCGTTCTTGCCAGGGCCCTTCCCGTCT
CGCGGCCCGGCTCCCTCACC CGAAGTGTGTGTCGCCGCTACTGGCTCAGCTCCAGCTAGGAGTCGCTGCGCAGC
GCCTTCAGGAGGCCACCGACATAGTGCAGAGAAGCGGACCACAATGCGGCGACTCCCGGCACGAGGCTGCGTCC
GCGATGGCGGAAGCGGAAACGCGCGGAGGCGGAGCATCTCATTGGACCCAATCCGAGGGCGGCGAGTGTGTCATCA
AGCTGCGCGGGGCATAGACGTCCGGGTGCGGCGCCGCGGGCGGAAGACGAGGGCGGCGAGGTTCGGGTCCGGG
CGCTTGGAGAAGATGGTGTGTCGCGCGGTGCTGGCCGCCCTGCTGCACAGCCCGAGCTGGTGGAAACGTCGTCA
GAGTCGCGGCCTATCCGACGTGCGGCGAGCTCAGCGCCTTCGCACTGCTGCAGGCCAGCTGCGGGGCCAGGAC
GCGGCCCGCCGCTGCAGGACCTGCGGCTGCGGCCGTGGGCTCCCTGTGCGCGCGCTGAGCGATTTAGAGAC
GCCTTCACCCAGGAGCTACGCGCGGCCCTCCGAGGCGGCTCGGGGCCACCAACAGGTAGCCAGAGGGGCCCTGGC
GCAAAACATTTAATCCTGGGCTGTGCGGGGCCGAGGCTGCTTGTCTTCTTCCGGGCTCTACAGTGGCATCAATG
TGGAGGGGTCAATCCGGGCACTGCGCGCGGCTTCGAATCCCGACTGGGATTGTTGGCCTGCAGACATCCACGCA
TAAGAGCCTAGGCCAGACCGCCGCTCCGTGAAGTCTTGTGATTGGACAAGACAGTGTGGAGAAAGACCCCT
AAGCCTAACAGAGATGAAGGTAGGCTGGTCCAGACACGGCACCTACGGAGAGCCACGGACCGAAGCCAGAGAGC
CTTTCTCTGCAAGTGGGACTGAACTCTTGACAGATGCTGCTCAATCTGACTGGTATAGCAGGACAGTTAATTC
CAGGGACGATATGGATGAAAAGACAACCTACAGCTGCCAAATTCCTTGTATTAAATGTGTGAGCTGGTGTATAG
GCATGAGTGTGATCTCTCAGGCAAGATGTGTTAAGAATACCGGGGACTGTAGGCCATATGTAATAATAAACAC
GTATTTTATGAAATGA

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FIGURE 1348

CCGGCTGCTGCGGACCTCTCTGGACCCGGACCCAGCCCCAGCCCCGGCCCCAGCCAGCCCCGACGGCGCCATGCGG
GGTCCGAGCGGGGCTCTGTGGCTGCTCCTGGCTCTGCGCACCGTGCTCGGTGGCATGGAGGTGCGGTGGTGGCGCC
ACCTCGGACCCAGAGCAGCACAAAGTGC GGCAACATGAGCGAGGCCTTCCGGGAAGCGGGCATCCAGCCCTCCCTC
CTCTGCGTCCGGGGCACCTCCGCCGACCACTGCGTCCAGCTCATCGCGGCCAGGAGGCTGACGCCATCACTCTG
GATGGAGGAGCCATCTATGAGCGGGAAAGGAGCAGCGCCTGAAGCCGGTGGTGGGCGAAGTGTACGATCAAGAG
GTCGGTACCTCCTATTACGCGGTGGCTGTGGTCAGGAGGAGCTCCCATGTGACCATTGACACCCCTGAAAGGCGTG
AAGTCTCTGCCACAGGGCATCAATCGCACAGTGGGCTGGAACGTGCCCGTGGGCTACCTGGTGGAGAGCGGGCCG
CTCTCGGTGATGGGCTGCGATGTACTCAAAGCTGTGACGCACTATTTGGGGGCACTGCGTCCCGGGGGCAGGA
GAGACCAGTTACTCTGAGTCCCTCTGTGCGCTCTGCAGGGGTGACAGCTCTGGGGAAGGGGTGTGTGACAAGAGC
CCCTGGAGAGATACTACGACTACAGCGGGGCTTCCGGTGCTGGCGGAAGGGGCGAGGGGACGTGGCTTTTGTG
AAGCACAGCACGGTACTGGAGAACACGGATGAAAGTCCATCACGAAGGCAAAACATGGACCAGATCTGAGGAGGAA
GAAGGCGAGTGCCTGCACACGAGGAAGCAGTAGGACGATGCGCTCTAGTGCTGGGCAAGCCTGGAAATGGGCT
CCCGTTACAGGCCCCAGGACGAGTCTGACAAGGAGAATTTGGA AAACGGGCAAGAGTAGGGATATGTTGGGT
TAAGAATCAGCTCTTTCAAACITGGGGTTTTTTTTGGGATGGGGGTCTACCATGTGCCAGGCTGGTCTCAA
CCCCAGCCTCACTGATCCTCGCATCTCAGCCTCCTGAGTAGCTGGGATGACAGGCTGCACCTGGCAGCTTTT
TCAAAGTGTGATGGTAATCTGAGGCAATCTAAGGGAGTCATTTTTAAGTGACTTTATACAGAAAGATTGGTAA
GAGCCAAGGGGTAGAAGTGGCATAAATGTCTAAGCAGGGAAGTGACAGGACTTTCATTGTTCTTGGCTGAGGAG
AAGCGGGAGTGGCTGATGGAAGCACCTAAATGATGCCTTTGTCTGTGGGAAGGCAATATGCCCCAGAGCTCTA
ACCAAAGTTTTTGACGCCGCCGAAAAACAGGAAAGTTGGGAAGCGGGGTAGGACTACACTGAATCATTAAACAGT
GCTGTAACATACCATGTGGCCATTAAACAATGACCTTTAGGGAGTTTTCTTAAACGATCACTCTGGTGGCGGGTGT
TGGTTTTGTTTTAAATAGCTTTGCACTGAAAGCTTTCATGACCATACAAATTATCTTTTTTCTTCTATTTCTCT
TGTAGAGGTTTTTTCTCTCTGTCTTAAGGTATAAAAAATATTGTTATGTGGGAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1349

MRGPGALWLLALRLTVLGGMEVRWCATSDPEQHKCGNMSEAFREAGIQPSLLCVRGTSADHCVQLIAAQEADAI
TLDGGAIEAGKEHGLKPVVGEVYDQEVGTSYYAVAVVRRSSHVTIDTLKGVKSCHTGINRTVGWNVPVGYLVES
GRLSVMGCDVLKAVSDYFGGSCVPGAGETSYSESLCRLCRGDSSGEGVCDKSPLEYYDYSAGFRCLAEGAGDVA
FVKHSTVLENTDESPSRRTWTRSEEEGECPAHEEARRTMRSSAGQAWKWPVHRPQDESDKGEFGKRAKSRDM
LG

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FIGURE 1350

GGGCGCCGCGGGGCGGAAGACGAGGGCGCGAGGTCGGGTCCGGGCGCTTGGAGAAGATGGTGCTGCGGCGGCT
GCTGGCCGCCCTGCTGCACAGCCCGCAGCTGGTGGAACGTCTGTACAGAGTCGCGGCCATCCGACGTSCGGCGCA
GCTCACGGCCTTCGCACTGCTGCAGGCCCAGCTGCGGGGCCAGGACGCGGCCCGCCGCTGCAGGACCTCGCGGC
TGGGCCCGTGGGCTCCCTGTGCCCGCCGCTGAGCGATTTAGAGACGCCTTACCCAGGAGCTACGCCCGGCCT
CCGAGGCCGCTCGGGGCCACCAACAGGTAGCCAGAGGGGCCCTGGCGCAAAACATTAAATCCTGGGCTGTGCGGGG
CCGAGGCCGCTTGCTTTTCTTCCGGGCTCTACAGTGGCATCAATGTGGAGGGGTATTCCGGGCACTGCGCGCG
GCTTCGAATCCCGACTGGGATTGTTGGCCTGCAGACATCCCACGCATAAGAGCCTAGGCCAGACCGCCGCTCCG
TTGAAGTCTTGATTTGGACAAGACACAGTGTGGAGACAGCCCTAAGCCTAACAGAGATGAAGGTAGGCTGGGTC
CAGACACGGCACCTACGGAGAGCCACGGACCGAAGCCAGAGAGCCTTTCCTCTGCAAGTGGGACTGAAACTCTTG
ACAGATGCTGCTCAATCTGACTGGTATAGCAGGACAGTTAATCCAGGGACGATATGGATGAAAAGACAACCTTA
CAGCTGCCAAATTCCTTTGATTAAATGTGTGAGCTGGTTGATAGGCATGAGTGTGATACTTCTCAGGCAAGATGT
GTTAAGAATACCGGGGACTGTAGGCCTATGGTAATAATAAACACGTATTTTATGAAATGA

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FIGURE 1351

MVLRRLLAALLHSPQLVERLSESRIIRRAQLTAFALLQAQLRGQDAARRLQDLAAGPVGSLCRRRAERFRDAFTQ
ELRRGLRGRSGPPPGSRGPGANI

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FIGURE 1352

ATGCCTGTCTTCATCTTGAAGAAAAGCTCCAGGTCCTTCTCCAGCCACCCAGCCCCAAGATGSGTGATGCTGCT
GCTGCTGCTTTCCGCACTGGCTGGCTCTTTCGGTGGGACAGGGGACAAGCATTTCATCTTGGGAAGTGCCCCAA
TCCTCCGGTGCAGGAGAATTTGACGTGAATAAGTATCTCGGAAGATGGTACGAAATTGAGAAGATCCCAACAAC
CTTTGAGAAATGGACGCTGCATCCAGGCCAACTACTCACTAATGAAAAACGGAAAGATCAAAGTGTTAAACCAGGA
GTTGAGAGCTGATGGAACGTGAATCAAATCGAAGGTGAAGCCACCCAGTTAACCTCACAGAGCCTGCCAAGCT
GGAAGTTAAGTTTTCCTGGTTTATGCCATCGGCACCGTACTGGATCCTGGCCACCGACTATGAGAACTATGCCCT
CGTGATTTCCTGTACCTGCATCATCCAACTTTTTCACGTGGATTTTGCTTGGATCTTGGCAAGAAACCCCTAATCT
CCCTCCAGAAACAGTGGACTCTCTAAAAAATATCCTGACTTCTAATAACATTGATGTCAAGAAAATGACGGTCAC
AGACCAGGTGAAGTCCCCAAGCTCTCGTAACAGGTTCTACAGGGAGGCTGCACCCACTCCATGTTACTTCTGC
TTCGCTTTCCCTTACCCACCCCCCCCATAAAGACAAACCAATCAACCACGACAAAGGAAGTTGACCTAAACAT
GTAACCATGCCCTACCTGTACCTTGCTAGCTGCAAAATAAACTTGTTGCTGACCTGC

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FIGURE 1353

MVMLLLLLSALAGLFGAAEGQAFHLGKCPNPPVQENFDVNKYLGRWYEIEKIPTTFENGRCIQANYSLMENGKIK
VLNQELRADGTVNQIEGEATPVNLTEPAKLEVKFSWFMPSAPYWILATDYENYALVYSCTCIIQLFHVDFAWILA
RNPENLFPETVDSLKNILTSNNIDVKMTVTDQVNCPKLS

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FIGURE 1354

GC GCGAGTGGGAGGTGGCAGGCCCTGCGACTCCGGCCTTGTCGCGCCCGCTCTCGCGCGAGCTCTCCAGCCATG

AACCGGTTTGGTACC CGGTTGGTGGGAGCCACGGCGACTTCTTCGCGCCGCCGAAGGCCCGCAGCAATGAA AAC
CTCGACAAAATAGATATGCTCTTGGATGATATCATCAAGTTGAATCGAAAGGAGGGAAGAGCAGAATTTTCCA
AGACTAAATAGAAGACTCTCCAGCAAAGTGGTGCCAGCAATTCCAGTAGAGTGCGATGGGAATCCCAACG
AATTTCTGGTTTGGTAAAGCTAGTCTGAATCATAGGGAAGAGTAATCCCTGGAAGAGACGTCCTAATGGAGTT
ATCACTGGCCTTGACGTAGGAAAACGACTGGAAATTCGAAAGGAATTAGTCCTATGAATCGTCCACCTCTAAGT
GACAAGAATATAGAACAATATTTCCAGTGTATAAAAGGAAGGCAAACCTCTTGAGACAAAATGAAGGGCAGAGG
AAACCAAGTAGCAGTTCTCAAGAGACCTAGCCAGCTAAGCAGAAAATAACATTCCAGCTAATTTTACCAGGAGT
GGAAATAAATTAATCATCAGAAAGATCTCGTCAGGCAACTTTTCTTTTCAGAAGAGGCCGTAAGGTGCAGGCC
CAGTTGAATACAGAAACAATGCTAGACGATGTAGTAGCAAGAGAGAACTCGTCAATGGCGGACTTCCACCACAAT
GGAGGGATTTTGAAGTGTATCTATTGACAAATCTGGAGCAGTGCAATGCCAGTAACCTCAGAAACCAAGATTAAT
CGTACTGCTGTACCTTCATTTTAAACAAAGCGGGAGCAAAAGTACGTCAAGAAAATTCCTAAGGTGTTCCCTTG
CAGTTTGACATAAACAGTGTGCGAAAACAGACAGGGATGACGTGAATGACGGGTTTGGGATCTCGAAGGAACAA
AGAGCCACTCTCACATACAAACAAAGGGGGAAGCCGCTTTGTACCCTGGGATAGTCCCATGTCAAGGAACCTTT
TGAGTAGACTCTCAGGAAGTGAATGTGCTTGAAGAGTTCATCAGGAAATCAAGAACTTTACTTCAAAATAT
CTCAAGGCTAAATAACTCTTATTTTATTTTGAAGGTTTTTTTTTTTAAAGAAAACAAACGTAATAAATAATG
TCCGAGGAAGAATAATAGGAGATATACCTGTCTGTCTTAAAGATTTTATGGTGGCTCAGACAGAACTATCTAT
GTTTGACTTTCTTTGGTTCCCTACAGCAGAGAAGGAGACAGAGGATGAAATGATTATTTTATGATAGCGGT
ATTACAGATCTCATACCTTTGGCCCGTGTTTAGACTTTGTGATGGTAAATCTGCTGCTTCCATAAACATTGAGTAG
GTCCTTGGTGTGCTGTCACTGCGCTTTAATAGTGTGTAGTGAGTCACTGCGGTGCTCTTTCTCTATTAGAGAC
ACAGAACAAATGATTAGAATTTCCAGCTGTGGGTTTGAAGACTTAGGGGACATCCAGACGCTGCTCTCTCTTC
AGACGGTGTAAGTCCCTTGAATTAACAGCTTTAGTGCTGAGCTTTTAAACAGGAAATGTGGCCCTAGGTATTA
GCTCTAGTTTAAATGTTGGTGTTTAGAGACTGTAAATGCATATTCACAAAGTTATGCTGATAGGGCCCTTGAGGA
GAAGGTCAGCTTTTAAAAAATGACAGTTTGTGTTTAAATAAATGAAGGCATGAGAGGAAGTAAGTAGCAAGTTGA
GGACAGGTAGTTGAGATGAAACACTTCAAACCCCTGGTTATAGATGTACTGTTGGATGTAGCATAGCTTGGAGT
CTAGCGTCCACAAAGAATTAATCAAATGATATTAGAGAATATTAACATTATACATTGAATGGAGTCCCTTGGAT
ATTTTGATAGTAAAAATTAATAGCCATAAAGTCCTAGACTTCTTATTTGAAGTTAAAAATTTCTTATTTGAAAGTT
GAAATTTATGAGCTTTGAAGATTGCTAAATTAATAATTTATAGCTCCAAAACAAAAATATACCTTGATATGTC
ACAGAGAAAAAATGCAAAATTTATAATAGAGTTACATAACCTTTGTTGTTTACCTTTCACTGATTCTCTATAT
GGTATAAATTAAGGTTACGGCAATTAATGCGGAAGAAAGGCCCTCCCAACCGCCGCACTGCCACTTGTGAGC
GAGTGGGAGAAGTTAGTCTGTGCTAAGATAGTACTGAGTCCCAGATGTTGTATACTGTAATTAACAGTATAATG
CCAAATGCAGCAAAATCTTCCAGCTGTACGTTACAAGTTTGGTCATTTTGAAGCTTGACATTTTAGTGTGGCAAT
ATGTTAAAAACATCTAAATAGTTTGTAGTTTCTCAGGAGTGAATGTTAGTGTGACTTTTCTGTGAAAGCAGAC
ATCGTTCTTGGCTGCGCCCTGCAATGTATAGTACTAGTTTCAATGTTGCTCTCACTGCTCTTGAGTGTCTCTATG
TTATGCTGCCCATGAAAGCTATCAGTAACAGTTTCTAGCTTATACCAAGAATAAATCTTATCTTTTAAATATCT
GATATTTTCTCGTACTCGTACTGATAAGGGATTAATGGAAGTCAGTCACAGAATTTGGAATAAATTTCTAGTCT
CTCCTTAGCTATTTGATGCTTTTCATATAGGCCAAGAACTACTTGCAAAACATTTTTCAGAGGATGAATGCGCTGT
ATTTGGCTAGGAACAGTACATTTAGTCTGATTTAGAATCTGGTAGCTTATTTAAAGCAAGAAAGCAGC
TGAGGCTCAAGTTTGTGTCCTTAGAATGTTTGTGAAATATGGTATAAAGGTGTTTCATTTTCTGTTCTTAC
CTATTATGTATAGACTATTCATGCCATTTTTTGGGAAAACCTTAAAAATTGCCCCAAATGACATTTGAGTG
CATTAATAACAAATTTCTTTGATACATTAACCTTTTATCTCTATGATCTGTAATTTTAAATTTAAAGTATAAT
GTTTGTGCTTTTGGTACAACATAAATAAAACTCTTGGTGGTCACATATTGTATATAAACAAAAACAATGCTTTGT
TGAAGGAAAATTTTCTTTTATTTGGAATGTTGGTTGTAATCCTGTTTCAGTCTCTAAGTTTCGGTTTTTTTAAAAAC
AGGATGCAACTTAACTTTCTTTGTCATCAAGGATATGCAAAACATTTGGTGCCGTGCATCACCAAATGAAAGTT
TGTATTTAAAGCAGGAGGTGCTTTACACTGTACTTTTTTGGTGTTTTTTGGAAAAGTTACATTTAGATCTATTTCTGA
AGCTGTTCAATTTTAAACAAATAAATGTTACAGGTTTACATGATTTATTTCTCAGCTCAAAAAAAGAAAAA
AAA

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FIGURE 1355

MNRFGTRLVGATATSSPPPKARSNENLDKIDMSLDDI I KLNRRKEGKKQNFRLNRRLLQQSGAQQFRMRVWRGIQ
QNSGFGKTSLNHRGRVMPGKRRPNGVITGLAARKITGIRKGISPMNRPPPLSDKNIEQYFPVLKRKANLLRQNEGQ
RKPVAVLKRPSQLSRKNNIPANFTRSGNKLNHQKDTRQATFLFRRLKVQAQLNTEQLLDDVVAKRTRQWRISTT
NGGILTVS IDNPGAVQCPVTQKPRLTRTAVPSFLTKREQSDVKKVPGVPLQFDINSVGKQTGMTLNERFGILKE
QRATLTYNKGGSRFVTVG

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FIGURE 1356

AATCAAGAGGTTCCAATCTTCGTGTTCACTTTAAGAACACTCGTGGAAGTGTCTCAGGCCACCAAGGGTATGCATA
TACGAAAAGCCACGAAGTATCTGAAAGATGTCACTTTACAGAAACAGCGTGTACCATTCCGACGTTACAATGATG
GAGTTGGCAGGTGTGCCAGGCCAAGCAGTGGGGCTGGACACAAGGTCGGTGGCCAGAAAGAGTGCTGAATTCT
CTGGTCATTGAGCATATCCAAGTGAACAAAGCACCTGAGATGTCCGCCGGACCTACAGAGCTCATGGTCGGATT
AACCCATACATGAGCTCTCCCTGCCACATTGAGATGATCCITTATGGAAAAAGGAACAGATTGTTCTAAACCAGAA
GAGGAGGTTGCCAGAAAGAAAAAGATATCCAGAAGAACTGAAGAAACAAAACTTACGGCACGGGAGTAAATT
CAGCATTAAAAATAATGTAAATTAAAGG

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FIGURE 1357

MSLYRNSAYHSDVTMVELASVRRPSSGAGHKVGGPKRVLSLVIEYIQVNKAPKMLRRTYRAHGRINSYMSSPWH
IEMILTEKEQIVPKPEKEVAQKKKISQKKLKKQKLMARK

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FIGURE 1358

TGTAGATTAGCTGTGAATATCTTGACTCCTTTAAGGTAATAAGGCITTTGTTTGTITTTATCTTTCACAGCTAGA
AAATTATGGCATGCCGTTTAGCAGAACTGAAGATGGGAAGATTATCAGCGTGCATTTGGTGGACAGAGCCTCAA
GTTTGGAAAGGGCAGGCAGGCCCATCGGTGCTGCTGTGGCTGATCGGACCGGCCACTCAATATTGCACACCTC
ATATGGGAGGTCTCTGAGATAIGATACCAGCTGTTTGTGGAGTATTTGCCTTGGATCTCCTGATAGAGAACAG
GGAGTGCCGTGGTGTCAATTGCACGTGTCATAGAGGACGGGTCCATCCATCACATAAGAGCAAAGAACACTGTTGT
TGCCACAGGGTAGG

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FIGURE 1359

TTTCCGTGCTACCTGCAGAGGGATCCATACGGCGTTGTTCTGGATTCCCGTCATAACTTAAAGGGAACCTTTCAC
AATGTCCGGAGCCCTTGATGTCTGCAGATGAAGGAGGAGGATGTCCTTAAGTTCCTTGACGACGGAACCCACTT
AGGTAGCACCAATCTTGACTTCCAGATGGAACAGTACATCTATAAAAGGAAAAGTGATGGCGTCTATATCATAAA
TCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTTGCTGTGTTGTTGCCATTGAAAACCTTGCTCATGTGAG
TGTTAAATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAGCCACTCCAATTGC
TGGCCGCTTCACTCCTGGAACTTCACTAACGAGATCCAGGCAGCCTTCTGGGAGCCACGGCTTCTTGTTGTTAC
TGATCCAGGGCTGACCACCAGCCTCTCACAGAGGCATCTTAAGTTAACCACCTACCATTTGCTCTGTGTAAAC
AGATTCTCCTCTGTGCTGTGTGGACATTGCCATCCCATGCAACAGCAAGGGAGCTCACTCAGTGGGTTTGATGTG
GTGGATGCTGGCTTGGGAAGTTCTGCGCATGCAATGGCACCATTTCCTGTAACACCCATGGGAGGTCATGCCCTGA
TCTCTACTTCTACAGAGATCCTGGAGAGATTGAAAAAGAGTAGGCTGCTGCTGAAAAGGCAGTAGCCGAGGA
GGAATTTCAAGGTGAATGGACTGCTCCAGCTCCTGAGTTCACTGCTACTCAGCCTGAGTTGCAGACTGGTCTGA
AGGTGTGCAGGTGCCCTCTGTGCCATTACAGAGTTCCTACTGAAGACTGGAGCGCTCAGCCTGCCATAGAAGA
CTGGTCTGCAGCTCCCACTGCTCAGGCCACTGAATGTGTAGGAGCAACCCTGAATGGTCTTAAGCTGTTCTTGC
ATAGGCTCTTAAGCAACATGGAAAAATGGTTAATGGAAAATAAACATCAGTTTCT

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FIGURE 1360

GGGAAACTTTCACAAATGTCGGGAGCCCTTGATGTCCTGCAGATGAAGGAGGAGGATGTCCTTAAGTTCCTTGCAG
CAGGAACCCACTTAGGTAGCACCAATCTTGACTTCCAGATGGAACAGTACATCTATAAAGGAAAAAGTGATGGCG
TCTATATCATAAATCTGAAGAGGACCTGGGAGAAGCTTCTGCTGGCAGCTTGTGCTGTTGTTGCCATTGAAAACC
CTGCTCAITGTCAGTGTTAAATCCTCCAGGAATACTGGCCAGAGGGCTGTGCTGAAGTTTGCTGCTGCCACTGGAG
CCACTCCAATTGCTGGCCGCTTCACTCCTGGAACCTTCACTAACGAGATCCAGGCATCTTAAGTTAACTACCTA
CCATTGCTCTGTGTAACACAGATTCTCCTCTGTGCTGTGTGGACATTGCCATCCCATGCAACAGCAAGGGAGCTC
ACTCAGTGGGTTTGATGTGGTGGATGCTGGCTTGGGAAGTTCTGCGCATGCATGGCACCATTTCCTGGTGAACACC
CATGGGAGGTCATGCCTGATCTCTACTTCTACAGAGATCCTGGAGAGATTGAAAAAGAAGAGTAGGCTGCTGCTG

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FIGURE 1361

ATCTGCAGTGGAGCCGCCACCAAAATGCAGATTTTCGTGAAAACCCCTTACGGGGAAGACCATCACCCTCGAGGTT
GAACCCCTGGATACGATAGAAAAATGTAAAGGCCAAGATCCAGGGTAAGGAAGGAATTCCTCCTGATCAGCAGAGA
CTGATCTTTGCTGGCAAGCAGCTGGAAGATGGACGTACTTTGTCTGACTACAATATTCAAAAGGAGTCTACTCTT
CATCTTGTGTGAGACTTCTGGTGGTGCTAAGAAAAGGAAGAAGTCTTACACCACTCCCAAGAAGAATAAGC
ACAAGAGAAAGAAGGTTAAGCTGGCTGTCCTGAAATACTATAAGGTGGATGAGAATGGCAAAATTAGTCGCCCTTC
GTCGAGAGTGCCCTTCTGATGAATGTGGTGCTGGGGTGTTTATGGCAAGCCACTTGACAGACATTATTGTGGCA
AATGTTGCTGACTTACTGCTTCAACAAACCAAGACAAGTAACGTATGAGTTAATAAAAGACATGAACATAAA
AAAA

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FIGURE 1362

MQIFVKTLTGKTTITLEVEPSDTIENVKAKIQGKEGIPPDQQLIFAGKQLEDGRTLSDYNIQKESTLHLVLRLLV
VLRKGRRLTLPRLRISTRERRLSWLS

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FIGURE 1363

CCCCCCGCTAATGTTTTGGCCGCTTCAAGATGGCGGTGCAGGAGTCGGCGGCTCAGTTGTCCATGACCCCTGAAG
GTCCAGGAGTACCCGACCCTCAAGGTGCCCTACGAGACGCTGAACAAACGCTTTGCGCGCGCTCAGAAGAACATT
GACCGGGAGACCAGCCACGTCACCATGGTGGTGGCCGAGCTGGAGAAGACGTTGAGCGGCTGCCCCGCGGTGGAC
TCCGTGGTACGCTGCTGGACGGCGTGGTGGAGAAGCTCAGCGTCTCTAAGAGGGAAGCGCGGTGGAATCCATCCAG
GCCGAGACGAGAGCGCCAAAGCTGTGCAAGCGCCGGATCGAGCACCTCAAAGAGCATAGCAGCGACCCAGCCCCG
GCGGCCAGCGTGTGGAAGAGGAAGCGCATGGATCGCATGATGGTGGAGCACCTGCTGCGTTGCGGCTACTACAAC
ACGGCTGTCAAGCTGGCGCCGAGAGCGGCATCGAGGACCTAGTGAATATTGAGATGTTCTCTGACGGCCAAAAG
GTGGAGGAGTCCCTGGAGAGGCGTGAGACGGCCACCTGCGTGGCCTGTTGCCATGACAACAAAGTCCCGGCTCCGG
AAGATGAAGAGCTGCGTGGAGTTCAGCCCTCAGAATCCAGGAGTTTCATTGAACATCATCCGGCAGAATAAGAGACTG
GACGCTGTGAGACATGCAAGAAAGCACTTCAGCCAAAGCAGAAGGGAGCCAGCTGGACGAGGTGCGCCAGGGCCATG
GGCATGCTGGCCTTCCCGCCGACACGCACATCTCCCGGTACAAGGACCTTCTGGACCTGCACGGTGGCGGATG
CTGATCCAGCAGTTCCGGTACGACAACCTACCGACTACACCAGCTGGGAAAACAACTCTGTGTTCAACCTCACCCTG
CAGGCTGGCCTCTCAGCCATCAAGACACCACAGTGCTACAAGGAGGACGGCAGTCTCAAAGAGCCCTGACTGCCCT
GTGTGCAGCCGCTCCCTGAACAAGCTGGCGCAGCCCTGCCCATGGCCACTGTGCCAACTCCCAGCTGGTCTGC
AAGATTTCTGGCGACGTGATGAACGAGAACAATCCGCCCATGATGCTGCCAACCGGTACGCTACGGGTACAAT
TCTCTGCTTCTATCCGTCAAGATGATAAAGTCGTGTGCCGAGAACCAGAAAGTCTTCCACTTCTCACAAGCC
GAGAAGGTGTACATCATGTAGGCCCCACGTCGTGAAGCGCACGCCCTCGGGGACCGGGTGCAGTGGCGGGGAGGC
CACGCGTTCCTCTGTCCACGCTCCAGCCTGCCCGCGCTTCTGTTTCTTGCACAAAAGATCCGTGAGCAAC
GATAAATACTCTTAGGAAGAGAGAAAATAAGGTTTCATAAGTTTGTACTTGAAAACATTTGGATTGGTAGGATTT
TGTAACACGTCAACCAITTTGATGCTTCTGAAAAGTACTTTCAACTTGCGAAGGAAACTCTTCTTTAAAGACTGAC
CTAAACACCGAGGGGAACTTAAGAACGTTTAAAATATAGGAGTCGGTGATTTCCTGTGTTTTTCAGTTTCTTTCC
TTCTGTGAACGATGAGACTTGGAGAACGGGCTGGTCTTCAACACTTCTCTGTTGGCCCTGGCCTGGCCGGGGAG
GTGGCAGCGGCACCGGACTGACCTGCAGTGACCCGCGATGCCCGGCCACGAGGGACACTTATGGCTTCATTGAG
AGCTGCTGCCAAAACGCTGGCGCCGCCACCGTCGGGGGCTGGCTTCGAGGACGCCCCGCTGCGTCGCGGGTCGT
GTCGCGGGGACTGTGTCTGTACGTGCATAGTTTCGATATCACATCGCGGGGCTGTGTCTGTAGCTGCGTCGTTTC
GATATCACACCTCTGTGTGCCGCTTACTTCTGCTTCGAGAATGTATAACGTGGAAATCCACGGGACCAAAAT
TCTGCAAGGCGCTTGGCGGATGGTTCATAACTGTAGAGTCTAATTTGCTATCCATTACAGAAATTAATCGTTCAG
TTGAAAGAGTACTGATGACTTTTCAAACAAATGAACCACCGTAGCTGACAGAGAACCGTATCGTAGAGGTTTG
TAGTTAGTGCATTATTTTTCATGATGTTGATGTTGACTAGCTAATAAACTGTAATGTAAACCATGCGCAATAAAATGG
TTTTCTATTCTC

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FIGURE 1364

CCCAGGTCGGACAGGCCGAGATGACGCCGAGCCCCCTGTTGCTGCTCCTGCTGCCGCCGCTGCTGCTGGGGGC
CTTCCCGCGCGGCCGCCGCCGCCGAGGCCCCCCAAGATGGCGGACAAAGGTGGTCCACGGCAGGTGGCCCGGGT
GGGCCGCATCTGCGCGCTGCGAGTGCCAGTGGAGGGGGACCCGCCCGCTGACCATGTGGAACCAAGGATGGCCG
CACCATCCACAGCGGGCTGGAGCCGCTTCCGCGTGTGTCGCCGAGGGGCTGAAGGTGAAGCAGGTGGAGCGGAGGA
TGCCGGCGTGTACGTGTGCAAGGCCACCAACGGCTTCGGCAGCCTGAGCGTCAACTACACCCCTGCTGCTGGA
TGACATTAGCCCCAGGAAGGAGACCTGGGGCCCGACAGCTCCTCTGGGGGTCAAGAGGACCCGCCACGCCAGCA
GTGGGCACGACCGCGCTTCAACAGCCCTCCAAGATGAGCGCCCGGGTGATCGACGGCCCGTGGGTAGCTCCGT
CGCGCTCAAGTGCCTGGCCAGCGGGCACCTCGGCCGACATCAGTGGATGAAGGACGACCGCCCTTGACGCG
CCACAGAGCCGCTGAGCCAGGAAGAAGTGGACACTGAGCCTGAAGAACCTGCGGCCGGAGGACAGCGGCA
ATACACCTGCGCGGTGTCGAACCGCGCGGGCCCATCAAGCCACCTCAAGGTGGATGTGATCCAGCGGACCCG
TTCGAAGCCCGTGCTCACAGGCACGCCCCGTGAACACGACGGTGGACTTCGGGGGGACCCAGCTCCTTCCAGTG
CAAGGTGCGCAGCGACGTGAAGCCGGTGATCCAGTGGCTGAAGCGCGTGGAGTACGCGCCGAGGGCCGCCACAAC
TCCACCATCGATGTGGCGGCCAGAAAGTTTGTTGGTGTGCCACGGGTGACGTGTGGTGGCGGCCGACGGCTCC
TACCTCAATAAGCTGCTCATACCCGTGCCGCCAGGACGATGCGGGCATGTACATCTGCTTGGCGCCAAACACC
ATGGGCTACAGCTTCGCGAGCGCCTTCTCACCGTGCTGCCAGACCCAAAACCGCGAGGGCCACCTGTGGCCCTC
TCGCTTCGGCGCATCGCTGGCCGTGGCCCGTGGTCAATCGGACATCCAGCGCGCGCTGTCTTCACTCTGGGCACT
TGCTCTCTGTGGCTTGGCAGGCCCAAGAAGCCGTGCACCCCGCGCGCTGCCCTCTCCCTGCTGCTGGGACCCG
CGCGCGGGACCGCCCGCCGCGGAGGAGGACACCAAGGACCTTCCCTCGTTGGGCCCTCAGCGCTGGCCCTGGT
GTGGGGCTGTGTGAGGAGCATGGGTCTCCGGCAGCCCCCAGCACTTACTGGGCCAGGGCCAGTTGCTGGCCCT
AAGTTGTACCCCAAACTCTACACAGACATCCACACACACACACACACTCTCACACACTCACACGTGGAG
GGCAAGGTCACACGACATCCACTATCAGTGCTAGACGGCACCGTATCTGAGTGGGCAGGGGGGGCCGCCA
GACAGGCAGACTGGGAGATGGAGGACGGAGCTGCAGACGAAGGCAGGGGACCCATGGCGAGGAGAAATGGCCAT
CACCCACAGGCAGTCTGTGTGTGAGGACATAGCCCCCTGGACACACACACACACACTGCTGGATGCATG
TATGCACACACATGCGGCCACACAGTGCTCCCTGAAGGCACACGTACGCACACACGCACATGCACAGATATGCCG
CTGGGCACACAGATAAGCTGCCCAATGCACGCACACGCACAGAGACATGCCAGAACATACAAGGACATGCTGCC
TGAACATACACGCACACCCATGCGCAGATGTGCTGCCGTGGACACACACACACACAGGATATGCTGTCTGGAC
GCACACAGTGCAGATATGGTATCCGGACACACAGCTGCACAGATATGCTGCCGTGGACACACAGATAATGCTGCC
TTGACACACACTGCACGGATATTGCTGGACACACACACACACAGTGTGCACAGATATGCTGTCTGGACACGC
ACACACATGCAGATATGCTGCCGTGGACACACACTTCCAGACACACGTGCACAGGCAGAGATATGCTGCCGTGGAC
ACGCAGATATGCTGTCTAGTACACACACACAGCAGACATGCTGTCCGGACACACACACAGCATGCACAGATATGC
TGTCGGGACACACACAGCAGCAGATATGCTGCCGTGGACACACACACAGATATGCTGCCCTCAACACTGCACAC
CGTGACAGATATGCTGTGGACACACATGTGCACAGATATGCTGTCTGGACATGCACACAGTGCAGATATGCTGT
TCCGGATACACAGCAGCAGACACATGCAGATATGCTGCCGTGGGACACACTTCCGGACACACATGCACACACAGG
TGCAGATATGCTGCCGTGGACACAGCAGACTGACGTGCTTTGGGAGGGTGTGCCGTGAAGCTGCAGTACGTGT
GCCGTGAGGCTCATAGTTGATGAGGGACTTCCCTGCTCCACCGTCACTCCCCAACCTCTGCCCGCTCTGCC
CGCCTCAGTCCCCGCTCCATCCCCGCTCTGTGCCCTGGCCTTGGCGGCTATTTTGGCACCTGCTTGGGTGG
CCAGGAGTCCCTACTGCTGTGGGTGGGGTGGGGGACAGCAGCCCCAAGCCTGAGAGGCTGGAGGCCATGGC
TAGTGGCTCATCCCACTGATTTCTCCCCCTGACACAGAGAGGGGCTTGGTATTTATATTTAAGAAATGAAGA
TAATATTAATAATGATGGAAGGAAGACTGGGTGACAGGACTGTGGTCTCCTCGGGGCCGGGACCCGCGCTGGT
CTTTCAGCCATGCTGATGACCACACCCTCCAGGCCAGACACACCCCAACCCCACTGTGCTGGTGGCCCCAG
ATCTCTGAATTTTATGTAGAGTTTGAGCTGAAGCCCCGTATATTTAATTTATTTTGTAAACATGAAAGTGCA
CCTTTCCCTCC

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FIGURE 1365

CCAAAGATGTTGACCAGGAAGATCAAGCTGTGGGACATCAACGCCACATCACCTGCCGCCGTGTGCAGCGGGTAC
CTCATCGACGCCACCACGGTGACCGAGTGTCTGCACACCTTCTGCAGGAGCTGCCGTGTGAAGTACCTGGAGGAG
AACAACACCTGCCCCACCTGCAGGATTGTGATCCACCAGAGCCACCCCTGCAGTACATCGGTCAIGACAGAACC
ATGCAAGATATTGTTTACAAATTGGTACCAGGCCTCCAAGAAGCGGAAATGAGAAAGCAGAGGGAGTTCTATCAC
AAATTGGGCATGGAGGTGCCGGGAGACATCAAGGGGGAGACCTGCTCTGCAAAACAGCACTTAGATTCCCATCGG
AATGGTGAAACCAAAAGCAGACGACAGTTCAAACAAAGAGGCCGCGGAGGAGAAGCCGGAGGAGGACAACGACTAC
CACCGCAGCGACGAGCAGGTGAGCATCTGCCTGGAGTGTAACAGCAGCAAACCTGCCGGGGCTGAAGCGGAAGTGG
ATCCGCTGCTCAGCCCAGGCGACCGTCTTGCACTCTGAAGAAGTTTCATCGCCAAAAAAGTCAACCTTTTCATCCTTT
AACGAGCTGGACATTTTATGCAACGAGGAGATCCTGGGCAAGGACCACACACTCAAGTTCGTGGTTGTCACTAGG
TGGAGATTCAAGAAGCGCCGCTCCTGCTGCACTACAGACCCAAAGATGGACTTGTGTGAATGGTGCCACACAGC
GCCCACAGACTGGGCCCTCGCACCTTGGGTGCTCCGGCCGCCGCTTAAGAACATTGCCTCTGGGTGTCTATG
TGGACCAGACTTCTGAATAGAGAAATATTATAACTTTTGTATGAGAGAG

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FIGURE 1366

GGGCTTGTCGGCATCCTGCTCCGCTGCAGGTTGTGCTTCCGGTGC GGAGGTCATGGACAAAATGGTGCCACCG
GTGCAGGTCTCTCCGCTCATCAAGCTCGGCCGCTACTCCGCCCTGTTCTCGGTGTGGCTACGGAGCCACGCGC
TACAATTACCTAAAACCTCGGGCAGAAGAGGAGAGGAGGATAGCAGCAGAAGAGAAGAAGAAGCAGGATGAAC TG
AAACGGATTGCCAGAGAATTGGCAGAAGATGACAGCATATTAAAGTGAGTGACCCTGCGACCCACTCTTTGGACC
AGCAGCGGATGAATAAAGCTTCTGTGTTGTGTGAT

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FIGURE 1367

MVPPVQVSPLIKLGRYSALFLGVAYGATRYNYLKPRAEERRIAEEKKKQDELKRIARELAEDDSILK

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FIGURE 1368

GGAGTGGCAGCCGGAGTCTGAACTGTCTGGGGGACCAAGCAGGAGCTTAAGATGGSCAAGACCTGGGGCCCTGG
GCAGACGCATCAAAGCAGGCAGAAGCAGGCATGSCCAGCAGGAAGACCAAGAAGAAGGAAGGGGTGCCCTCCGG
GCCCAGAGAGCCTCATCCAATGTCTTCCAACTTTGAGCAGACTCAGATCCAGGAGTTCAAGGAGGCATTACACA
CTCATGGATCAGAACCGAGATGGCTTCATTGACAAGGAGGACCTGAAGGACACCTATGCCTCCCTGGGCAAGACC
AACGTCAAGGACGACGAGCTGGACGCCATGCTCAAAGAGGCCTCGGGGCCCATCAACTTCACCATGTTTCTGAAC
CTGTTTGGGGAGAAGCTGAGCGGTACCGACGCCGAGGAGACCATTCTTAACGCCTTCAAGATGCTGGACCCGGAC
GGGAAAGGGAAAATCAACAAGGAGTACATCAAGCGTCTGCTGATGTCCCAGGCTGACAAGATGACGGCGGAAGAG
GTGGACCAGATGTTCCAGTTCGCCTCCATCGATGTGGCGGGCAACCTGGACTACAAGGCCTCAGCTACGTGATC
ACCCACGGGAGGAGAAGGAGGTGAGACCCAGCCGGGTCAATAAACCTGGACGCTTGGAA

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FIGURE 1369

MASRKTKKKKEGGALRAQRASSNVFSNFEQTQIQEFKEAFTLMDQNRDGFIDKEDLKDTYASLGKTNVKDDDEL
DAM LKEASGPINFMTFLNLFGEKLSGTDAAETILNAFKMLDPDGKGKINKEYIKRLLMSQADKMTAAEVDQM
QFASI DVAGNLDYKALS YVITHGEEKEE

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FIGURE 1370

CAGTAGTCCTTGGGGCGGAAC TGGCCCCCGTGGCCCCGGCCGCTCGGCCCACTCCGCCCGCAGGCGGTCCC
GGCCACGCGGGAAGTCTTAA GCCCGGGCGGCCGCGGGACCGCGGAGACCCGTGGA GGCCGCCGACGATG
CGGGGCCGACGAGGCCGAGACGGGGTTGGCCGAGCCCCGGGCCCTGTGCGCGACGGGGCCACCGACCTACG
CGCGCCGCTGGGTGTTCTGTCTCGGATCAGCCTGCTCAACTGCTCCAACGCCACGATCAACTGGCTGTCACTGG
TCTACTCTGGTATCCACCCCAATTGGCGTGGCGCATCTGGATCCTGGA CTCCGTCGGCTCCGTGCGGGC
TCGGTGTCTATACCATCCCTGCTGGCGTGTCTGCTGCTGTCCACCATCTGCTGTGGGAGAGTGTGCCCCCA
CCCCGCCCTGTGCGGGGCTGCCAGCTCCACCTCAGAGAAAGTTCTGGATGGGCTCAAGCGCAGCTCATGTGGA
ACAAGCCCTATGTCATCCTGGCTGTGTCTTGGGGGGAATGATCGGGATCTCTGCCAGCTTCTCAGCCCTCCTGG
AGCAGATCCTCTGTGCAAGCGGCCACTCCAGTGGGTTTTCCGGCCTCTGTSGCGCTCTCTTCATCAGCTTTGGGA
TCCTGGGGGCACTGGCTCTCGGCCCTATGTGGACCGGACCAAGCACTTCACTGAGGCCACCAAGATTGGCCTGT
GCCTGTTCTCTGTGGCTGCGTGCCCTTTGCCCTGGTGTCCAGCTGCAGGGACAGACCCTTGCCCTGGCTGCCA
CCTGTCTGCTGCTCGGGCTGTTTGGCTTCTCGGTGGGCCCGCTGGCCATGGAGTTGGCGGTGAGTGTTCCTTCC
CCGTGGGGGAGGGGGTGCCACAGGCATGATCTTTGTGCTGGGGCAGGCCGAGGGAATACTCATCATGCTGGCAA
TGACGGCACTGACTGTGCGACGCTCGGAGCTGTCTTGTCCACCTGCCAGCAGGGGGAGGATCCACTTGACTGGA
CAGTGTCTCTGCTGATGGCCGGCCTGTGCACCTTCTTCAGCTGCATCCTGCGGTCTTCTTCCACACCCCAT
ACCGGCGCCTGCAGGCCGAGTCTGGGAGCCCCCCTCCACCCGTAACGCCGTGGCGGGCGCAGACTCAGGGCCGG
GTGTGGACCGAGGGGAGCAGGAAGGGCTGGGGTCTTGGGGCCAGCAGCGGCACTCCGAGTGCACGGCAGGG
GGCCTCGCTAGAGGACCCAGAGGGCCCCGGAGCCCCCACCAGCCTGCCACCGAGCACTCCCCGTGCGCAAG
GCCAGCAGCACCGACGCGCCCTCCGCCCGGCGAGACTCGCAGGCAGGGTCCAAGCGTCCAGSTTTATTGACC
CGGCTGGGTCTCACTCCTCTCTCTCCCTCCCGTGGGTGATCAGCTAGCTGAGCGCCTTGATGTCAGGTTGCCG
CCACATCGATGGAAGCGAACTGGAACATCTGGTCCACCTGCGGCGCGGAGGAAAGGGCTCCTTGCGGGCTCCGG
GAGCGAATTACAAGCGCGCACTGCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1371

MAGPTEAETGLAEPRALCAQRGHRTYARRWVFLLAISLLNCSNATINWLSLVYLVVSTPFGVAAIWILDSVGLRA
ALGVYTI PAGVVCLLSTICLWESVPPTPPSAGAASSTSEKFLDGLKPQLMWNKAYVILAVCLGGMIGISASFSA
LEQILCASGHSSGFSGLCGALFITFGILGALALGPYVDRKHFTEATKIGLCFLSLACVPFALVSQIQGTLALA
ATCSLLGLFGFSVGPVAMELAVECSFPVGEAATGMIFVLGQAEGLIMLAMTALTVRRSELSLSTCQQGEDPLD
WTVSLLLMAGLCTFFSCILAVFFHTPYRRLQAESGEPSTRNAVGGADSGPGVDRGGAGRAGVLGPSTATPECTA
RGASLEDPRGPGSPHPACHRATPRAQGAATDAPSRPGRLAGRVQASRFIDPAGSHSSFSPPWVIT

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FIGURE 1372

GGCACGAGGGGTTCCGTTTCCGGAGTGGAGGGCACGCCAGGGTGTCTGAAGCTGAGACCCCGGGCTCGCAGTCGC
CCCATGAATTTCGAGTTCCGCAACTGACGCTACTGGGCGGGGCTTCATGGCCAGGGGCTCGCTCAGGCCCTAAGTT
TCCCCACCTGTGCTCAATGCACAGGTGCGGTGCCGCTCCAGGGCCGGCCGAGAAGAGAGGGCCGCACCCGCACGG
GGACTGCATCTCCACAGAGCGCCCCGCGAGCGGGCCGAGCGGGGACTCCATGCCTAGAGTGCCCCCGGGCGGGC
CGGGCGGGGGGACTCCATGTCCTAGAGTGCCCCCGGGCGGGCGGGCGGGGACTCCATGTCTTAGAGTGCCCC
GCGGGCGGGCGGGCGGGGACTTCATGTCTAGAGTGCCCCCGGGCGGGCGGGCGGGCGGGCCGACCCGAC
AGGTTCGGGACTGGGCGCTGCGGCCCTGCTCCGCGCGCGGGCGGGGCGGTAGCTCGACAGCTTCCGCGCGGTG
CGCGATGGACAGCCCCGAGGTGACCTTCACTCTCGCTATCTGGTGTTGCGCGTGTGCTGTTTACGCCCAA
CGAGTTCACGCGGGGGGCTCAGGTCGACAACTGTGCTGTGCGGCTGGCTGGGCAGCGAGGACGCGCCTTCGT
GCCCTTCCACTTGCGCCGACGCGGCCACGCTGTTGTGCCACTCGCTGCTGCCGCTCGGCTACTACGTGGGCAT
GTGCTTTGCGGCTTCAGAAAAGCGGCTCCACGCCCTCAGCCAGGCCCTGAGGCTTGGCGGCTTCTCTGCTGCT
GGCCGTGACCTTCCCTCCATCGCCTGCATCCTGATCTACTACTGGTCCCGTGACCGGTGGGCTGCCACCCACT
GGCGCGCACCTTGGCCCTCTACGCCCTCCACAGTCTGGCTGGCAGGCTGTTGCCCTCTCTGTCAACACTGAGTT
CCGGCGGATTGACAAGTTTGCCACCGGGTGACACAGGTGCCCGTGTGATTGTGACAGACAGTGGGTGATGAAGGT
AACCACCTACCGAGTGACGCTGGCCAGCAGCAGGACGTGCACTGACTGTGACGGAGTCTCGGCAGCATGAGCT
CTCGCCAGACTCGAACTTGCCCGTGCAGTCTCTACCATCCGTGTGGCCAGCACCAACCTGCTGTGCAGGCCCT
TGACATCTGGAGCTGGAGCGCTGCA~~TAG~~CTGCATGCAGACAGTGCCAGCGTGAAGCTGGTGAAGACCTTGGCAG
GAGGACGACACAGGCGAGTGCCAGCAGTGTACTGCCGCCCATGTGGTGCTCACCTGCATGGGCAAGTGGTTG
GCCAGCGCGCAGGACCCCTTGCGCCCTGACACCTGGCTGGCCAGCGCGTGCCTGCCCACTGCCGCGCACGC
TTCTGCATCCTGGATGTGTGCACCGTGCCTGAGTGGGCTGGGCGCTTGAAGTGACTCTGTGTCTCCCGCAAG
CCACAGGCGAGGGAAGGGGTGGCTGGGCTCTGGCTGGCAAGGGCTCTACTTAAAGCACATGATGTAGAGA
ACTCGCCTTGCCTTGGCTCTGCAGAAAGGTGAGGACTTTTGGTTAAAGCAATCCTCATGAAAACACCCACCC
TGCTTGGCAGCCAGGGTACAAGTCTGGGCACCTCCTCTTGGCTCCCTCTGCCCTTTCTGCTGGTGGGGC
AGATCCTGCACACACAGACAGCGCTTGCCCCGAGCCATTCCCTGGAGACCTGGGTCTACCCAGGTGGTCTG
TCATCTGGGCCAATTGGCTTACTTCTGTGAGCATACCCACCTCAGTTACGTGCCAGACCTGGACCGCATCTC
CTGCCGTGTCTGGAGCTGGCCCTGGCTGCCTGGAGGACCTGGGTAGGTCTGAGGGTGGGATGGAGAAGAGG
GCACCTGCTGTGGTGTGGGAGCAGTCTGGGGCTTCTGGTGGCTGTGACCAGTTGAGGGGCTGTTCTCGGTGGG
GTGGCAATGGGAGGACAGGTGAGAGCGCCCTCATTTGTGGGGCTGCCCTCCGGGTTTCTCATCTGTCTTGGT
GCCTTTTTCTGCCCAACAAGTCCAGGGAAGGCCGAGGTCTCAGACTCCTGGGTAGGGGTGGGGTTTGAAGTTGAG
GACCAAGTGCCATAGCGCATCCAGAACACAGCCACAGGGGTCCAGCCAGGCTACCCACTCCCTAGGGT
CTCCAGGCTCAGAAGGGGATGCACGCCCTCTGGTCAAGCTCTGGTGGGGCTTGGCCGAGTCTGCTGAGTGT
TCAAGGGGAGGGGGATGTTGGCCAGGCCCCAGGGCACAGCCCTGACACAGGTGTGGCTACTGGAGGGGCTTCA
TACCTGCGGCCCAAGGCCCTTGGGCTTGGCTGTTTGAAGGCAGAGTGATGGACTCCGGGGGCTGACACTTGGG
ATTTCAGGGGCTTCTAGAGCGCTCAGCAGGTGAAGGCAGCAGGGCCATCGCCGGGAGCCAGGCTAGCTTTGA
ACTGAGTTTCAAGGGCTGCCAAGAGGGGCGAGTGGGTGGGGTTGTTTTACTACAAAATAAGTTACTTAGTTTT
ATAAAGACAACCCAGATTGTAGCCAAATGACACCATATTTAATAAAATTTAGTCTGAAGTGAIAAAAAAAAAAAAA
AAAAAA

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FIGURE 1373

MDSP EVTFTL LAYLVFAVCFVFTPN EFHAAGLT VQNL LSGWLGSEDA AFVPFHLRRTAATLLCHSLLPLGYVVMC
LAASEKRLHALSQAPEAWRLFLLLAVTLPSIACILIIYWSRDRWACHPLARTLALYALPQSGWQAVASSVNTFR
RIDKFATGAPGARVIVTDTWVMKVITYRVHVAQQQDVHLTVTESRQHELSPDSNLPVQLLTIRVASTNPVQAFD
IWSWRPA

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FIGURE 1374

GGCGCGGTAGCAGCCAGGCTTGGCCCCGGCGTGGAGCAGACGCGGACCCCTCTTCTTCTGGCGGCGGCGGCGG
GGCTCAGAGCCCGGCACACGGCGGGCGGGCAGAAATGAGTCTGCAGGCTCTTAAACGACAAAAATGTGACAAATGAA
AAAAATACAGAAAATTTGCCACTTCTGTTTTTCGCCACCAGAAATTACCGGAAGATCGTCTGTTCTTGGTGTGA
CAGAAAGAAAATGTGCCACCAAGAACCTGGCCAAAGCTATGAAGGTGACTTTTCAGACACCTCTGCGGGATCCA
CAGACGCACAGGATTTAAGTCCTAGCATGGCCAGCAAACTTGAGGCTCCTTTTACTCAGGATGACACCCCTTGG
CTGGAAAACTCACACCCCGTCTGGACACAGAAAGAACCAACAGCTCATCAAGGAAGTGGATGCCAAAACCTACT
CATGGAATTTCTACAGAAACAGTGGAGGCTGACACCGACCTCTGGGGGATGCAAGCCCCAGCCTTTGGGAGTGGC
AGCTCCAGCGAGTCTGGCCAGGTGCCCTGGCTGACCTGGACTGCTCAAGCTCTTCCAGAGCCAGGAAGTTCT
GAGAACCAAAATGGTGTCTCCAGGAAAAGTGTCTGGCAGCCCTGAGCAAGCCGTGAGGAGAAACCTTAGTTCCTAT
TCTTTAGACAGAAAGTGTACACCCGCCTCTGAGACCTTAGAAGACCTTGCAGGACAGAGTCCAGCACAAGCG
GAGACTCCGCACGAGGCCGAGGAAGATGCAAGCGGAGACTCCGCACGGAGCCGAGGAGGAATGCCGCGACGGT
GGGGTCTGTCTCCCGACAGTGGCCACTTGCCTCTTGGTGAATCCTTAAGGAAGCCTGCGGAGGAGCACC
CTCAGGGTCTGCCTGGCGAAGCCCTGGGCTGCCCTGCGGTGGGCAACCCCTGCCAGCAGATGGCACTCAG
ACCCCTACCTGTGCACACACCTTGTCTTGGAGACACAGCCCCAACCAACACCTTGGTGGCTGGCAGGGCCATG
ACCTTGAGTCTCTAGGAAGAGTGGCTGACGCCAAATGGCCAGCTCTCGAGGAGCGGACCTGTAAACTAGAA
TTTGATGTAATCTGATGGCGCCACAGCAAAAGGGCACCCCAACAGGAGACTGGGAGAGAGGTCCGGCTCAAG
CCTCCCTTGAGGAAGCAGCAGTGAAGCAGCAAAAGCCCCGACGAGGTGGAGGAGACGACGGTAGGACGGGA
CGAGGAGAGGACCCCCCATGCCAGCTTCTCGGGGCTTACCACCTCGACTGGGACAAAATGGATGCCCAAAC
TTCATCCCGTTCGGAGGTGACACCAAGTCTGGTTCAGTGAAGGCCACGCCCAAGAACCCCTGAGACCGGCTG
GGCCAGCCAGCGGCTGAACAGTTGCATGCTGGGCTGCCACGGAGGAGCCAGGTCCCTGTCTGAGCCAGCAGCTG
CATTCAGCCTCAGCGAGGACACGCTGTGGTGCAGTTGGCAGCCGAGACCCCAACAGCAGAGCAAGGAGAGA
GCCTTGAACCTCTGCCAGACCTCGCTTCCCAACAGCTGCCAGGCACTGAGCCAGTGGCCACCCATCAGCAGGG
CAGCTTGCCTTGGAGCTGAAAGAGGAGAGCTTCAGAGACCCCGCTGAGGTTCTAGGCACGGCGCGGAGTGGAT
TAGCTGGAGCAGTTTGAACCTTCTCGTTTAAAGAGTCCGCCCTGAGGAAGCAGTCCCTTATACCTCAAGTTCGAC
CCCTCTGAGGAGCAGTCTTGGTAGACAGTGGCCCTGGCCACCAGACAGCAGCATGCACGGTGCAAATGAG
ACTCCCTCAGGACGTCCCGCGGAAGCCAAGCTTGTGGAGTTCGATTTCTTGGAGCACTGGACATTCCTGTGCCA
GGCCACCCCGAGGTGTCCCGCGCTGGGGGCCACCCCTGTCCACCGSACCTATATGGACCTGCTCCAGTAC
AGCCAGAAGGACCTGGATGCAGTGGTAAAGGCACACAGGAGGAACCCGGAGCTGAGGAGCAGGTGTGAGGAG
CTCCACGGGAAGAACCTGGAACCTGGGGAAGATCATGGACAGTTGCAAGAGGTTGTGTACCAAGCCATGGAGGA
GTTCAAGCAGAAAGAACTTTCCAAGCTGAAATCCAGAAAGTTCTAAAAGAAAAAGACCACTTACCACAGAT
CTGAACCTCATGGAGAAGTCTTCTCGACCTTCTGAAGAGTTCGAGGATTACCTGGCAAGGATACCCAGGAGGGCCAGAGGTAC
CGCAAGAACAGAGTCACTGAAGAAGTGGTGGAGGATTACCTGGCAAGGATACCCAGGAGGGCCAGAGGTAC
CAAGCCCTGAAGGCCACCGCGGAGGAGAAGCTGCAGCTGGCAACAGGAGAGATGCCCCAGGTCCGGAGCAAGGCC
CAGGCGAAGAGCTTGGCCCTCAGGCCAGCCTGAGGAAGGAGCAGATGCGCATGCTGGAGAGACAGATG
GAGCAGAAGACTTAAAGAGAACGAGGAGCTGACCAGGATCTGCGCAGACCTCATCTCCAAGATGAGAGAAGATCTGA

CCTCCACGGAGCCGCTGTCCCCGCCCCCTGCTCCCGTCTGCTGTCTGCTGATTCTCTTAGGTGTCTATGTC
TTTTTTCTGTCTGTCTTCAACTTTTTTAAACTAGATTGCTTTGAAAACATGACTCAATAAAGTTTCTCTTC
AATTAAAAA

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FIGURE 1375

MSLQVLNDKNVSEKNTENCDFLFSPPPEVTGRSSVLRVSQKENVPPKNLAKAMKVTFTQPLRDPQTHRILSPSMA
SKLEAPFTQDDTLGLENSHPVVTQKENQQLIKEVDAKITTHGILQKPV EADTDLLGDASPAFGSGSSSESGPGALA
DLDCSSSSQSPGSSSENQMVSPGKVS GSPEQAVEENLSSYSLDRRVTPASETLEDPCRTESQHKAE TPHGAE ECK
AETPHGAEEECRHGGVCAPAAVATSPPGAIPKEACGGAPLQGLPGEALGCPAGVGTVPVADGTQTLCAHTSAPE
STAPTNHLVAGRAMT LSPQEEVAAGQMASSSRSGPVKLEFDVSDGATSKRAPPPRRLGERSGLKPP LRKA AVRQQ
KAPQEEVEEDDGRSGAGEDPPMPASRGSYHLWDKMDDPNFIPFGGDTKSGCSEAQPPE SPETRLGQPAEQ LHAG
PATEEPGPCLSQQLHSASAEDTPVVQLAAETPTAESKERALNSASTSLPTSCPGSEPVPTHQQGQPALELKEESF
RDPAEVLGTGA EVDYLEQFGTSSFKESALRKQSLYLKFDPLLRDSPGRPVVPATETSSMHGANETPSGRPREAKL
VEFDLGLALDIPVP GPPPGVPAPGGPPLSTGP IVDLLQYSQKDLD AVVKATQEENRELRSCEELHGKNLELGI
MDRFEEVVYQAMEEVQKQKELSKAEIQKVLKEKDLTTDLNSMEKSFSDLFKRFEKQKEVIEGYRKNEESLKKCV
EDYLARITQEGQRYQALKAHAEEKQLANEET AQVRSKAQAEALALQASLRKEQMRIQSLEKTYEQKT KENEELT
RICDD LISKMEKI

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FIGURE 1376A

TGGTCTTGAACCTCCTGACCTTGTGATCCGCTCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACC
GTGCTCTGTCTAGAACCACTGTGAATCTTAACTGAGACAAAGATTTCGCCATGTGTGCCAGGCCTGGTCTCGAACT
TCTGTGACTCAAGCGATCTACTTGCCTCTGCTCCCAAAGTGTGGAAATGTCAGGTGTGAGCCACTGCACCCGGCC
CTTGCTCATGTTTGAATGATAATTTACCTGGGCATAAAATCTGGACACTTGTGGTGGCAGCAGCTGTCTGCTT
TTCTGTGGAGAGCTGCGGGTTGAGACACACAGCAGCCCCCTATTGCTGCACGTACGGTGCTTCCACCTCAGTACT
GTGGAGACTCTCGGGCCGCATACGCCCTGTGCGCGGGCATCTGTGCGTTGCAGGAGATCAGCAGCATCCATGAC
CGCAACCCATCAGAGTGTCTTAAGAACGGAAGCATCTGGGCTGGATGGAAATTTAGCATCAAGCAGAGTCCCTTT
CTGTTCAGAGTGTGTAAAGTGCATAAAGATGAAGCAGGCACCAAGAAATCCTCGGCAGTGCCAACGGGAAGACT
CGAGCTGCGAGGTGAACCGCGAGTGTCTGTGTCTCTCAGCAAAGCCACAGCTCTCCAGTAGCTGACGAGGGGG
TCATGCAGAAATTTAAGCGCCACGACGCCCTGCCCTTTATTTCAGCCGACAGCTGAAAGATCTTACTTCCCGG
TGTTTAAATGGAGAACCCCGCGCACACGATGCCAAACTGCGTTTGTAGTCCAGGAAATGAAAGGATTGGGACAC
CCCCATAACACTACCCCTATCAAAAATGGCTCTCCAGAAATTAAGCTGAAATACCAAAACATACATGAATGGGA
AGCCTCTCTTTGAATCTTCATTTGTGGTGACAGTGTGCTGATGTGTCTCAGTCAGAAAGAAATGGACAAAAAC
CAGAAACCAAGCGGAGAGGAACAGGAGAGGAGCATAAATATGACTCCTTGTGAGCAGGGCCCTGTGCAAG
CAGCTCTTGTGCTAAAGATCTCAAGTCTTCAGATAAAAGATTCCAGCTAAGAAAGAGTCTTGTGCAAACT
GAGGAGACAAAGGACCCCTGTGAAATACAACTGGTGTGTTGGTGTGGTCAAAAGTGTGCGGTACCCCTGGT
GGCCTTGCAATGGTTTCTGCAGATCCACTCCTTCACAGCTATACCAAATTTAAAGGTGAGAAAGAGTGCACGCC
AGTATCACGTACAGTCTTTGGTGACGCCCCAGAAAGCTTGGATATTGAGAAGAGCCTGTAGCTTGTGTTGAAG
GAGAAGGACAGTTTGAATAATTATGCCAGGAAGTGCCAAAGCAGCCACCAAGAGCTGAGAAATTAAGCTAT
GTGAACCAATTTTCAGGGAATGTGAGGGCCAGTGGGAATGGGCATTGTTCAGCAGAGAAGCTGCAAGCATGT
CAGTGAAGAGCGGAAGCGCAAGTCTACCTTTCTCTATGTGGGGACACAGCTTCATCTCAACCTCAAGTAGCCA
AGGAGGCTGGCATTGCTGCAGAGTCTTTGGGAGAAATGGCAAGATCCTCAGAGTCAAGTGAAGAGCTGCTGAAA
ACCCCAAGTCTGTGAGAGAGAGTGCATTCCTATGAAGAGAAGCGGAGGGCCAACTGTGACTCTGCAGAGA
CCCTGAGAGTCAACCCGACATAGGGAGAGTACTCCTCAAAAGACGGCAGAGCTTGCACCAAGAGGAGTAG
GGTCTCCTCCTGGGAGGAAGAGCACAGTCTCCATGCCACGAAGCAGGAGAGGAGATGCAGCATCCCAATTT
TGGTCTCTGTCAAAAACACAGGGATGAGGTGGTAGCTGAGCACCCAGATGCTTCAGGTGAGGAGATTGAAGAG
TGCTCAGGTACAGTGGAGTCTGCTGAGTGAGAAGCAGAGACGCTACAAACCAAGTTTGCCTTGGTGGCC
CTGTCCAGGCTGAAGAAGACTCTGTTAATGTAATGGGAAAAAAGAAACCAACAAAGAGATACAGGACCTCA
CAGAAGATGCTGAAGCTGAGGACACACCCAGGAAAGACTCAGGACGGACAGCAAGTCTTCGGAAGAGAGACA
CAATCACTGACAAAACGGCCGACAAAGCTCTTACAAGGCCATGGAGGCAGCCTCTCCCTCAAGACCCAGCAG
CAACGAAAAATCTGTCTGATGATCAACCACTGAAGAAGCGAAATCGGGCTTCCACGGGACATCTTCAGCT
TTGGGTTTAGCAAAAGTTCATCTCCTTCTGCATCCTTAACTGAGAATGAGGTCTCGGACAGCCCGGAGACGAGC
CCTCGAGTCCCCATACGAAAGTGAGACGAAACAAACTGAAGTATCTGTCTATCAAAAAGTCTGAGCGAG
GAGTACTGCCCCAAAGGAGATGTGTGCCAGCTGTGAGGAAGCCGGCAGCTCTGCTCTGTGAAGGACCT
GCTCGGAGCTTCCACCTCGCTGCTTGGGCTTCCCGGAGGCCAGAAAGGAGGTTCACTGCACGAGTGTG
CCTCAGGGATTACATCATGTTTCGTGTGTAAAGAGCAAGACAGATGTTAAGCGCTGTGTGGTGAATCATGTG
GAAATTTTACCATGAGGCTTGTGTGAAAAAATACCTCTGACTGTATTTGAGAGCCGAGGTTTCCGCTGCCCCC
TCCAGCTGTGTGAGCTGCCATGCTTCCAACTTCAAAACCAAGGCCGTCAAAAGGTAAGATGATGCGGGTGT
TCCGCTGCCCTGTGCTATCAGCAGCGGATGCTTGTCTGGCAGCAGAGTGTGAGTATCGCTACGACAGCA
TCATCTGCACTGCCACTTCACTGCTCGGAAGGGGAAGCAGACACCAGCCACGCTCAAGTGAAGTGGTCTG
TGTGCTCAAAAGGGGGAGCCTTCTGTGCTGTGAGTCTGCCAGCGGCTTCCACCTGACTGCTGCAACATCG
AGATGCTTGCAGCGCAGCTTGTGTGCAATGACTGCGGGCTGGGAAGAGTGTGCACTTCCAGGATATCATTGGG
TGAATCTTGGAACTCAGATGTGGCCCGCAGAAAGTTTGCCTATCCAAAAATGTCCCCCAATATTCAGAAAA
TGAAGCAGCAGATTGCGAATTCCTCTGTGTTTTCTTGGGTCAAAGATTATTACTGAGCAGCATCAGCCGCGAG
TGTTCCCGTACATGGAGGGGACCGGGCAGCGCTACAGGGGGTCAAGGGATCGGAAGAGTCTCAAAAACG
CACTGCAAGAAGCTGAAGCTCGTTTTGTGAAATTAAGCTTCAGAGGGAAGCCCGAAGAACAGGAGCGGAGC
GCAAGCCCCACCATACAAGCATCAAGGTGAATAAGCTTACGGGAAGTCCAGATCTACACAGCGGATATTT
CAGAAATCCCTAAGTGAACCTCAAGCCCCACAGATGAGAACTCTGTGGCTTGTATTCGAGTGTCTGAACAGGA

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FIGURE 1376B

TGCTGATGTTGAGTGCCACCCGCAAGTGTGTCCCGCGGCGGAGTTCTGCCAGAACCAAGTGTCTACCAAGCGCC
AGTACCCA GAGACCAAGATCATCAAGACAGATGGCAAAGGTTGGGGCTTGGTCCGCAAGAGGGACATCAGAAAGG
GAGAATTTGTTAACGAGTACGTTGGGAGCTGTATCGACGAGGAGGAGTGCATGGGCAAGATCAAGGACGCGACAG
AGAAAGCAGCATACCCCACTTCTACATGCTCACTATAGACAAGGACCGTATAATAGACGCTGGCCCCAAGGAAATCT
ACTCTCGATTTATGAATCAGACGTGCCAGCCCAACTGTGAGACCCCTCAAGTGGACAGTGAATGGGACATCTGCTG
TGGGCTCTTTGGCGCTGTGACATTTCTGCAAGGACGAGGAGTCTTTAACTACACATCTCGATTTGTCTGGGCA
ATGAAAAACCGGTCTGCCGCTGTGGAGCTCCAATTGCAGTGGATTCTCTCGGGATAGACCAAGACCTCGACGA
CCCTTTTCATCAGAGGAAAAAGGCAAAAGCAAGAAAGAAACGAGGCGCGCAGAGCAAAAGGGGAAGGGAAGA
GGCAGTCAGAGGACGAGTGTCTCGTGTGGGTGATGCGGGGAGCTGGTCTGTGTGACCGCAAGTTCTGCACCA
AGGCTTACCACTGTCTCTGCTGGGCTTGGCAAGCGGCCCTTCGGGAAAGTGGGAATGTCTTGGGCATCTTGTG
ACGTGTGTGGCAAACTCTGACTTCATTTTGCCACCTCTGCCCAATTCGTTCTGTGAAGGACACAGGACGGGA
CAGCCTTACGCTGCACCCCGGACGGGCGGTCTACTGCTGTGAGCATGACTTAGGGGCGGCATCGGTGAGAAAGA
CCAAGACTGAGAAGCCCCCCCCAGAGCCAGGGAAGCCGAAGGGGAAGAGGCGCGCGGAGGGGCTGGCGGAGAG
TCACAGAGGGCAAAATAGCGCCAGGCGCGGCTTGGCCGGAATCCAGGGGCGGTGAGGGCGGCCGGCCCTGCTGCG
GGGAGAGGGCGAGCATGAATGCTGCCCGGAGGACCCAGCTCGAGCCGCCAGGACACAGAGCTACAGGCTCTCTCGG
GAGGGAGCGCTCCCAACCACTGAGCCATCTCAGCAGGTCCGCTGCGTCTGCATGATGACCGCTCGAGCCCA
GCTCAGCGTTCTGGACAAACAGCCTCACTCTCAGCGTTACCGCCACACTTGAATTTCTCCGAATGTGCAAGTT
CCCTCCCACTCTAATTTTTTAGGTTAAAGTTAATTTGGCATATGGAATGTTTAACTCTCTCTGAATTTGTGAGG
TAGGCTTTTTCCAGAGGTCGCTAGAAACTCGTCTTCGCGTTGCCCTTTCTGGCTCTCAGCGCGCTGCCCACTC
GGGAGAGGCTGGGTGAGGCGCGTGTGAGGACTGACCTGGATTCTCGAAACTGCCATTTGTATCTACTTCTGCG
TCTTTGGAATGGCTGTACTTTTTTTGTAATAATGTAATTTGTTCTCAGAAACGCTCTTTTCCATCTCTAGT
GAGAAGCTGGCCCTGACAGGTGGTGGCAGCAATGGTGTGTGAAGATTCTCCCGTAGTTTTCTCTCATGGAT
TTGAAATGAATGGCAATAACAGCTCCACTTTCAGCGTGTAGTTTACGCGGAGCACTTTCGAGGCTGGCGGGTT
GGGCTACTCTCTACCTGGGCTATCTTCTGAACTCGCTAGGTTCTTATCAACATTTGGGGGATAAATTTGTATA
TTTTTTCATTGGCTTTCTTTACAGTTTCTGATTTTTATTCTCAATATATTTTGTCTAAACCTATTTTCACAA
ATCACCACCGACTGAAGTGTGTGTTTACTGTAGCGGCCCTGAGCTCCATGCGAAAGAGTACTTTCGACGGCG
TGAGACCGCAGTCTGCTTAGAGCACAGGAAGTGAACCTTAGGGAGCCCGTAGGGCGCTGCAGGCCCGGGGAC
CCGACGACGTTGGGTCTAAAGAGAGACGAGTCTAGTCTCTCTGCCACCCAGAGTGGCTTCCATCTCAGCACTCTG
TGGGCTGTGATGGAAGTGTGAGTCTCTGCTGATCAGTGTGCCCTCTGCCACCACTACTGAGAGGTGCGG
TCTTGGGGTGGAGGCTGCTTGGCAGGTGTGCGTGCTCGTACGTGTGTTATGGGCACTGGCTTAGGCCAGGTA
TGACACCCACTCTCTGTGAGATTTTCACTTTAGTTTTTAAAGGCTCAGTTCTACAGAGTGAATATCTATCT
GAGTACTACATAGTTTAAAGACTTGGTCTTTTTTTTGAAGGATCCTTGACCTTGGGAAGTCTGGAGCACCTGA
GAAGGGGACCACTGTTGTGCTTTTGCCACGTTGCTGAGGGGCTGCTTGTCTGGGAGGGAGGAGAGAACTTC
AGACGAGGTGCTTTTTATGGCTTTTTTAAATAACCTAAGGGGACACATCCATCTTGACAGAAAGTTTAC
AGAACTCCCTTGAAGAACTGCTGCTGAGGCTCCTGTAAATTTCTGTGGCATCTTTATGCTTGGTAAAGAACT
CGATGTCTTTGGACCTGAGAGTGGCTACTCCGTGTTTTGTGACCTGTAAGCTGGGTGACGGGTGTGTGGC
CCTGACAGGTTCCACGCTTCCCTGAGCACTGACTGGAAGTTCTACGTGCTGGTGGCTGTGCCCTTCTCCCATCAGG
GTCGCCAGCAAGTTAACTACACAGAGGACCCAGGGGAAACAGAGCTGTGTAGCACTGACTTGTCTGCCGGCGCG
TGGCTCTGAGGGGCACTGCCGTTTAAAGACAGGGTGGGAGTGTGCTTCCGATTCAGACTCTAACTCTCTCCCA
AAGTGTCTTAAGAAAACTAGGATCGGCTCATAGATTTATGCTCCTATGATGCCCTAACTTGAAGGTTGTCT
AGGGAAGCGCGGGCAGTGTCCCCACACACCTTAGAGTCGAAGGCCCGAGGGCCCGCTGTCACTTGCCCAAA
AGATCCCTTCGCGCAGGTAAGGACCTACCAATGCTTACGTCAAAACAGCAAGATCGGCTTTGACGACTTTGG
GGAGCAGATATTAATCTATTTTTGTGTTGAGCAGTAGGAAATCTTGTGATTTTTAATCGCTTTGATAATACTTC
CAAAATTTATGATTTTTCTGAAGAAATAATGCAAACTTTTAAATAAGTTTTCTCCCTTTTCCAAAACTGTA
AACTAATGAGCAAGTAACTAACTTTGAATGTCTCTACAATACCGTTGATAACTCAGTGGAGCCAGGCTTTGG
GGTAGCGGCCCTGAGCTTGCAGGGTTTCTCGCCAGCTGGGGCTGACCAGCCCCAGCTGTGACCGTGGGTGTGG
TGCGCTGCGGCCCTGCCAGCTTTGCTTGTGAGGACGTGGTACTCTGTAAGCTTCAACTCTCAACTCTGATCATT
AATGTGAAGCAAAACAAAAACCGCCCAATCCCTCAGGATTCCTTGGCATCCGAAACAGCATCTGACCACTAA

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FIGURE 1376C

ACCCATACCCACCCGTGTGCGCCACAGGGGATGTGTCCGAATGGGCAGCTTAAATGTGGTCACCTGTGGGG
AAACTCTTCAGGCACCTGAAGTGAGAACCCAGCTGTCCGTCCTCAGGCCGGCCTTTCTTCCGGCGACACCCGTCC
ATGGCTGGCTGGGTCCCTTCGCAGTGTGTTGCTGTCTTGACATCTAAACCCCGCGGTGTGCAGTGCCCATCTTC
CAGGACTACCTTATTTCCAGAATTAAACCTGTTTATAATTCAAGTTAATGCAAATGACTGTCAGTTGCCAAAT
ATCTTGATCCTGTGAGTGTAGTTGATGACTGTTTGTAGTCAGTAGAGTAAATGCTGTGTCCACGGGGTGTAC
AGCCTCACCATACCTGTTGAGGTGTGAAATGCCCGTCAGAAATAAATACAACTTAAATGTGCCTATTGGTG
TCTAAACTTCATACAAATGTAAGGTGAGATTCCCTTTAGGAATACTGGGTGCTGTCCACAGGTTTGATAGTTAGAC
TTAAAACTTGAAATTCACTTTTTGGGGGAGGGATATACTGAAATAGAGAGTTGAGACTTGCCAGTTGGGGAA
AATAGCATTTAAATGGAAGCTGTGTTTGGAAAATTGTGTATGAGTATTTTGTATTAACACATTTTAAAGGC
TTTTTCTTAA

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FIGURE 1377

MEFSIKQSPLSVQSVVKCIKMKQAPEILGSANGKTPSCEVNRCSVFLSKAQLSSSLQEGVMQKFNGHDALPFFIP
ADKLKDLTSRVFNPEP GAHDAKLRFESQEMKGIGTPPNITPIKNGSPEIKLKITKTYMNGKPLFESSICGDSAAD
VSQSEENGQKFPENKARRNRKRSIKYDSLLEQGLVEAALVSKISSPDKKIPAKKESCPNTGRDKDHLKYNVGD
VMSKVS GYPWWPCMVSAADPLLHSYTKLGQKKSARQYHVQFFGDAPERAWIFEKSLVAFEGEGQFEKLCQESAKQ
APTKAEKIKLLKPISGKLRAQWEMGIVQAEAAASMSVEERKAKFTFLYVGDLHLNPPQVAKEAGIAAESLGEMAE
SSGVSEEAENPKSVREECIPMKRRRRRAKLCSSAETLESHPDIGKSTPQKTAEDPRRGVSGSPGRKKITVSMRPR
SRKGDAASQFLVFCQKHREDEVVAEHPDASGEEIEELLRSQWSLLEKQRRARYNTKFALVAPVQAEEDSGNVNGK
RNHTKR IQDPTEDAEADTPRKLRLTDKHSLSLRDITTDKTARTSSYKAMEAASSLKQAATKNLSDACKPLKKR
NRASTAASSALGFSKSSSPSASLTENEVSDSPGDEPSESPIESADETQTEVSVSSKKSERGVTAKEYVCQLCEK
PGSLLLCGPGCCGAFHLACLGLSRRPEGRFTCECASCAGIHSFCVCKESKTDVRCVVTDQCGKFYHEACVKYPLT
VFE SRGFRCP LHSCVSCHASNP SNRPP SKGMMRCVRCPVAYHSGDACLAAGCSVIASNSICTAHFTARKGKRH
HAHVNVSWCFVCSKGGSLCCESCPAAFHPDCLNIEMPDGSWFCNDRCRAGKKLHPQDI IWKVLGNRYRWWPAEVCH
PKNVPPNIQKMKHEIGEFVFFFGSKDYWTHQARVFPYMEGDRGSRYQGVRGIGRVFNALQEAERFREIKLQ
REARETQESERKPPPKYKHIKVNPKPYGKVQIYTADISEIPKCNCKPTDENPCGFDSECLNRLMFECHPQVCPAGE
FCQNQCFTKRQYPETKIIKTGKGWGLVAKRDIRKGEFVNEYVGELEDEECMARIKHAHENDITHFYMLTIDKD
RIIDAGPKGNYSRPMNHSQPCNCTLKWTVNGDTRVGLFAVCDIPAGTELTFNYNLDCLGNEKTVCRCGASNC SG
FLGDRPKTSTLSSSEKGGKTKKTRRRRAKGEGRQSEDECFRCGDDGGLVLCDRKFC TKAYHSLCGLGKRPF
GKWECPWHHCVDVCGKPS TSFCHLCPNSFCKEHDQDGFATFCTPDGRSYCCEHDLGAASVRSTKTEKPPPEPGKPKG
KRRRRRGWRRVTEGK

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FIGURE 1378A

TGGTCTTGAACCTCCTGACCTTGTGATCGCGCTCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACC
GTGCGCTGCTCTAGAACCCTGGTAACTCTTAACTGAGACAAGATTTCGCCATGTTTGCCACAGGCTGGTCTCGAACT
TCTGAGCTCAAGCGCATCTACTCGCCTCGCTCTCCCAAAGTGTGGAAATTGCAGGTTGAGGCCACTCGACCCGGCC
CTTGCCCTCATGTTTGAATGATAATTTACCTGGGCATAAAATTTCTGGACACTTGTGGTGGCAGCAGCTGTCTGCTT
TTCTCTGGAGAGCTCGGGGTTGCAGACACCAGCAGCCCCCTATTGCTGCACGTGAGGTGCTCCACCTCAGTACT
GTGGACATCTCGGGCCGCATAGCCCTGTTGCGCGGCGATCCTGTGCGTTGCAGGAGATGCAGCAGCATCCATGAC
CGCAACCCATCAGAGTGTCTAAGAAGCGAAGCATCTGGGCTGGATGSAATTAGCATCAAGCAGAGTCCCCCTT
CTGTTTCAGAGTGTGTAAGTGCATAAAGATGAAGCAGGCACCGAAATCTCTCGGCAGTGCACACGGGAAGACTC
CGAGCTCGAGGTTGAACCGCGAGTGTCTGTGTTCTCAGCAAGCCAGCTCTCCAGTAGCTGCAGGAGGGGG
TCATGCAGAAGTTTAAAGGCCACGACGCCCTGCCCTTTATTCAGCCGACAAGCTGAAAGATCTTACTTCCCGG
TGTTTAATGGAGAACCCGCGCACACGATGCCAAACTGCGTTTTTGATCCCAAGGAAATGAAAGGGATTGGGACAC
CCCCTAACACTACCCCTATCAAAATGGCTCTCCAGAAATTAAGCTGAAATCACCACCAATACATGAATGGGA
AGCCTCTCTTTGAATCTCCATTGTTGGTGACAGTGCTGCTGATGTGCTCAGTCAAGAAATGACAAAAAC
CAGAAAAACAAGCGAGAAGGAACAGGAAGAGGAGCATAAAATGACTCCTTGCTGGAGCAGGCGCTTGTGCAAG
CAGCTCTTGTGCTTAAGATCTTCAAGTCCCTCAGATAAAAAGATTCCAGCTAAGAAAGAGTCTTGTCCAAACACTG
GAAGAGACAAGAACCCCTGTGAATAACAACGTTGGTGATTTGGTGTGGTGCAGGCTCTCGGGTTACCCCTTGGT
GGCCTTGCAATGGTTTCTGCAGATCCACTCCTTACAGCTATACCAAATTAAGGTGAGAAAGAGGTGCACGCC
AGTATCAGTACAGTCTTGTGGTGAAGCGCCCAAGAAAGAGCTTGGATATTCAGAGATCCGAAAGAGCTGTGTAAG
GAGAAAGCAGCTTTGAAAAATTAAGCCAGGAAAGTGCCAAAGATGCGCAAGCTTCCAGAAAGCTGAGAAAAATTAAGCTAT
TGAACCAATTTCAAGGAAATGAGGGCCAGTGGGAAATGGGCATTGTTCAAGCAGAAAGAGCTGCAAGCATAT
CAGTGGAGGAGCGGAAAGCAAGTTCACCTTCTCTATGTGGGGAGCAGCTTCACTCAACCTCAAGTAGCA
AGGAGGCTGGCATTGCTGCAGAGTCTTGGGAGAAATGGCAGAATCCTCAGGAGTCAGTGAAGAGCTGCTGAAA
ACCCCAAGTCTGTGAGAGAGAAGTGCATTCCCATGAAGAGAAGCGGAGGGCCAACTGTGACTCTGCAGAGA
CCTCGGAGATCACCCCGACATAGGGAAGAGTACTCTCAAAAGACCGCAGAGGCTGACCCCAAGAGGAGTAG
GGTCTCCTCTGGGAGGAAGAACACAGTCTCCATGCCACGAAGCAGGAAGGGAGATGCAGCATCCCATGTTT
TGGTCTTCTGCAAAACACAGGGATGAGTGGTAGCTGAGCACCCAGATGCTCAGGTGAGGAGATTGAAGAGC
TGCTCAGGTACAGTGGAGTCTGCTGAGTGAGAAGCAGAGACCGCTACAACACCAAGTTTGCCTTGTGGGCC
CTGTCCAGGCTGAAGAAGACTCTGGTAAATGTAATGGGAAAAAAGAAACACACAAAGAGGATACAGAGCCCTA
CAGAAGATGCTGAAGCTGAGGACACACCAGGAAAAAGACTCAGGACGGAACAGCAGATCTTCGGAAGAGAGACA
CAATCACTGACAAAAACGGCCAGAACAGCTCTTACAAGGCCATGGAGGCAGCCTCTCGCTCAAGAGCCAGCAGC
CAACGAAAAATCTGTCTGATGATGCTAAACCCTGAAGAAGCAAGAAATCGGGCTTCCAGCGCAGCATCTTCGCT
TTGGGTTTAGCAAAAGTGCATCTCCTTCTGCTTAACTGAGAATGAGTCTCGGACAGCCCGGAGACGAGC
CCTCGGAGTCCCATACGAAGTGCAGACGAACACAACTGAAGTATCTGTCTCATCAAAAGTCTGAGCGAG
GAGTGACTGCAAAAGAGATGTTGTGCCAGCTGTGTGAGAAGCCGGCAGCCTCTGCTCTGTGAAGGACCT
GCTGCGGAGCTTCCACCTCGCCTGCTTGGGCTTCCCGAGGGCCAGAAAGGAGGTTACCTGCAGCGAGTGTG
CCTCAGGTGTGCCCGGCACAGTCTGGGGTCTGTGAGGATGATGAGAGGACCTGCACAGCCGTGGCCCTTCTCT
GCCACTACCGGGCCCAAGAGTCTCCTATCTCAGCTCAGAACACTTCTGGTCAGGAAGCACCTGGAGAGT
CTCCAGGCCATGCGACGCCACAGCAGCACTCACTTATGGGAGTGTCTGTCTGCTGCCAGCCATGATAAGT
ACTGCTCCACACTGCGCAGCTGCTCAAGGAGGAAAGCCTCTTTTCAAGGAGGCCCTTCTTCAAGTCTTCT
TGCCAGTTAGACTGGGCCCTCCCAAGCCAGGCTGCCAGTAGAATTTCTCTGATTTTCAGGTGAAGCTGAGGCTCA
GATCGCAGCAAGGTAATCCTTGTGAGTGGATCTTTTGTGAGAGAATGCTTGGACTAGTAGCAAGTGTGGAACA
CAGGGCCAGGTGCTTTAGCAGCGTGGCTGCCCTGAAGAGGAGTGTCTTGAATTTAGTGGCTCAGAAGTGCAT
TAATCTTGTTCTTTGCACCTCTCTCCACCCCTTCTTAACTTTTGTTAGGAGTCACTCATGTTCTGTGTG
TAAAGAGAGCAAGACAGATGTTAAGCGCTGTGTGTAACCTCAGTGTGGAATTTTACCATGAGGCTTGTGTGAA
AAAAATCCCTCTGACTGTATTTAGAGGCCGAGGTTTCCGCTGCCCTCCACAGCTGTGTGAGCTGCCATGCTCT
CAACCTCTCAACCCAAAGCGGCTCAAAAGGTAATAATGATGCGGTGTGTCCGCTGCCCTGCTCATCAGCGG
GATGCTGTGCTGTGCAGCAGGATGCTCAGTGATCGCCTCCAACAGCATCTGCATGCCACTCCACTGCTGTGCTG
GAAGGGGAAGCGACACCAAGCCCAAGCTCAACGTGAGCTGTGTGCTGTGCTCAAGAGGGGGAGCCTTCTGTG

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FIGURE 1378B

CTGTGAGTCTGCCACGCGCCTTCCACCTGACTGCGCTGAACATCGAGATGCGTGACGGCAGCTGGTTCTGCAA
TGACTGACGGGCTGGGAAGAGCTGCACTTCCAGGATATCATTGGGTGAAACTTGGGAACTACAGATGGTGGCC
GGCAGAAAGTTGCCATCCCAAAATGTTCCCCAAAATATTACAGAAATGAAGCAGGAGATTGGAGAAATTCCTGT
GTTTTCTTTGGGTCTAAAGATTATTACTGGACGATCAGGCGCGAGTGTCCCGTACATGGAGGGGACCGGGG
CAGCCGCTACACGGGGGTGAGAGGGATCGGAAGAGTCTTCAAAAACGCATCGCAAGAAGCTGAAGCTGCTTTTCG
TGAATTAAGCTTCAGAGGAAGCCCGAGAAACACGAGGACGCGAAGCCGCCAACCCACCATACAAGCATCAA
GGTGAATAAGCCTTACGGGAAGTCCAGATCTACACAGCGGATATTTCAGAAATCCCTAAGTGCAACTGCAAGCC
CACAGATGAGAATCCTTTGTGGCTTTGATTGCGAGTGTCTGAACAGGATGCTGATGTTTGAGTGCCACCCCGAGGT
GTGTCCCGGGCGAGTTCTGCCAGAACCAGTGCTTCAACAGCGCCAGTACCAGAGACCAAGATCATCAAGAC
AGATGGCAAGGGTGGGGCCTGGTGCACAGAGGGGACATCAGAAAGGGAGAATTGTTAAACGATACGTTGGGA
GCTGATCGACGAGGAGGATGCATGGCGAGAATCAAGCACGCACACGAGACGACATACCCACTTCTACATGCT
CACTATAGACAAGACCGTATAATAGACGCTGGCCCCAAAGGAACTACTCTCGATTTATGAATACAGCTGCCA
GCCCAACTGTGAGACCTCAAGTGGACAGTGAATGGGACACTCGTGTGGGCTGTTTGCCGCTCTGTGACATTCC
TGCAGGACGGAGCTGACTTTTAACTACAACCTCGATTGTCTGGCAATGAAAAACGGTCTGCCGGTGTGGAGC
CTCCAATTGCAATGGATTCTCTGGGGATAGACAAAAGACCTCGACGACCTTTCATCAGAGGAAAAGGGCAAAA
GACCAAGAGAAAACGAGCGCGGACGAGCAAAAAGGGGAAGGACGAGTCAGAGGACGAGTGCTTCCGCTG
CGGTGATGGCGGCGACTGGTGTGTGTGACCGCAAGTCTGCACAAAGGCCTACCACCTGTCTCGCTGGGCT
TGGCAAGCGGCCCTTCGGGAAGTGGGAATGTCTTGGCATCATTTGTGACGTGTGTGGCAAACTTCGACTCATTT
TGGCACCTCTGCCCAATTCGTTCTGTAAGGAGCACGAGGACGGGACGCTTCAAGTGCACCCCGGACGGCG
GTCTTACTGCTGTGAGCATGACTTAGGGCGGCATCGGTGAGAAGCACCAAGACTGAGAAGCCCCCCCCAGAGCC
AGGGAAGCCGAGGAGGAAAGGCGGGCGCGGAGGGGCTGGCGGAGAGTACACAGAGGCAAAATAGCGCCAGGCGC
CGCTTGGCCGATCCAGGGCGGTGCAGGGCGGCCGGCCCTGCCTGCGGGAGAGGGCGAGCATGAATGGCCGG
AGGACCCAGCTCGAGCGCCGAGGACACAGAGCTACAGGCCCTCTCGGAGGGAGCGCTCCCCACCATGAGCA
TCTCAGCAGCTCGCTCGCTGCTGCACTGATGACCGTCTGAGCCCCAGCTCAGCGTTCTTGGAACACAGCCTCA
CTCCTCAGCGTTACCGCCACACTTGAATTTCTCGGAATGTCAAGGTTCCCTCCCACTATTATTTTATAGTTAAA
GTTAATTGGCATATGGAATGTTTTAATCTCCTCTGAAATGTGTAGCGTAGGCTTTTCCCAAGGGTCGCTAGAAA
TCGCTCTGCGGTTGCCCTTTCTGCTCTCAGCGCCGTGCGCACTCGGAGAGGGCTGGGTGAGGCCGCTGTGAG
GACTGACCTGGATTCTCGAACTGCCATTGTGATCACTTCTGCTGTTTGAATGGCTGTATCATTTT
GTACTAATGTGAATTTCTCTCAGAAACGCTTCTTTCCATCTAGTGAGAACTGGCCCTGACAGGTGGTGGCAG
CAATGGTGTGTGAAGATTTCTCCCGTAGTTTTTTCTCCTCATGGATTGAAAGAAATGCAAAATACACGCTCCAC
TTTCAACGTGTAGTTTACCGCGGACACTTTCGAGGCTGGCCGGTGTGGGCTTACTTCTCACTGGGCCATCTT
CTGAACCTCGTAGGTTCTTATCAACATTTGGGGATAACTTTGTATATTTTTTCATTGCGCTTTCTTTACGAG
TTTCTGATTTTTATCTCAATATATTTTTGCTAAACCTATTTACAAAATCACCACCGACTGAAGTGTGTGTTAC
TGATGGGCGCTGAGTCCATGCGGCAAGGAGTGAATTTTCAGGGCTGAGACGCCAGATCTGCTTAAGACACAGG
AAGTGACAACTTAGGGAGCCCCGTAGGGCGCTGCAGGCCCCGGGGACCCAGCAGCTGGGTCTAAGAGAGACGG
AGCTAGCTCTCTGCCACCCAGAGTGCTTCCATCTCAGCACTCTGTGGGTGTGGTATGGAAGTGCAGTCTC
TGCTGATCACATGTGCCCTCTGCCAGGGCACTTACTGAGAGGTGCGGTCTGGGGGTGGAGGCCGTGCTGGCAGG
TGTGCGTGCCCTCGTACGTGTGTTATGGGCACTGGCTAGGCGAGGTATGACACCCACTCTCCTGTGAGATTTAC
TTTAGTTTTTAAAGGTCTGATTCTACAGAGTGAGACCTATCTATCTAGACTACATATGTTTAAAGATTTGCT
TCTTTTTTTGAGGGATCCTTGACCTGGGAAGTCTGGAGCACCTGAGAAGGGGGACCATGTGTGCTTTGCC
ACGTGTCTCTGAGGGGTGCTTGTCTGGGAGGAGGGAGAGAACTTACGACAGAGTGCCTTTTTATGGCCCTTTT
CTTAAATAACCTAAGGGGAGACACATCCATCTTGACAGAGAGTTTACAGAATCCCTTGAAACTGCTGCTGAG
GCTCCTGTATAAATTTCTGTGGCATCTTTATGCCTTGTGAAAACTCGAGTGTCTTTGGACCTGAGAGTGGCTA
CTCCGTGGTTTTGTGACCTGTGAAGCTGGGGTTACGGGTTGAGGGTGTGTGGCCCTGACGGTCCCACGCTTCTGAGCA
CTGACTGGAAGTTTCTGCTGCTGTGGCTGCTCCCTTCTCCATCAGGGTCCCAGAAAGTTAATACACAGAGG
ACCCAGGGGAACAGAGCTGTGTGACCACTGACTTGTCTCGCGCGGGCTGGCCCTGAGGGGCATCGCCGTTAA
GACAGGGTGGGAGTAGTCTTTGACGTTTCCAGTTCAAGCTTCAACTTCTCCAAAGTGTCTTAAGAAAATCTGGATCGG
TCATAGATTTATGCTCCTTATGATGCCTTAATCTGGAAGGTGTGTTAGGACAGGCCGGGCAAGTGTCCCCACAC

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FIGURE 1378C

ACACCTTAGAGTCGAAGGCCCCAGGGCCCCGCTGTCACTTGCCCAAAAGATCCCTTCGGGCAGGTAAGGGACTAC
CAATGCTTACGICAAAACAGCAGAATCGGCTTTGCAGTGCACITTGGGGAGCAGATATTAACTTATTTTTGTGTT
GGACAGTAGTGAAATCTTGATTTTTTAATCGCTTTGATAATACTTCCAAATTTTATGATTTTTCTGAAGGAAAT
AATGCAAAACATTTTAAATATGTTTCTCCCCCTTTCCAAAACTGTTAAACTAATGAGCAAGTAACACTAACTTTG
AATGTCTCTACAATAACCGTTGATAACTCAGTGGAGCCAGGCTTTGGGGTAGCGGCCCTGAGCTTGCAGGGTTTC
TCGCCACTGGGGCTGACCAAGCCCCAGCTGTGACCGTGGGTGTGGCTGGCTTCGGCCCTGCCAGCTTTGTTC
TGAGGACGTGGTGACTTCCTGAACATCAGCTTCAATCCTCCATCATTAAATGTGAAGCAAAACACAAAAACCGCCC
CAATCCCTCAGGATTCTTGGCATCCGAAACCAGCATCTGCACCTAAACCCATACCCACCCGTGTGCGCCACAG
GGGGATGTGTCGAAATGGGCAGCTTAAATGTGGTCACCTGTGGGGAAACTCTTCAGGCACCTGAAGTGAGAAC
CCAGCTGTCCGCTCCTCAGGCCCGCCCTTTCTTCGGGCGACACCCGTCATGGCTGGCTGGGTCCCTTCGCAGTGT
TTGTCTGTCTTGACATCTAAACCCCGCGTGTGCAGTGCCCATCTTCCAGGACTACCTTATTTCCAGAATTAAA
CCTGTTTTATAATTCAAGTTAATGCAAAATGACTGTCAAGTTCGCAAAATATCTTGATCCTGTGAGTGATGTGTA
CTGTTTGTAGTCAGTAGAGTAAATGCTGTGCCACGGGGTGTACAGCCCTCACCATACCTGTTGAGGTGTGA
AATGCCCGTCAAGAAATTAATACAAACTTAAATGTGCCATTGGTGTCTAACTTCATACAATGTAAGGTCAGA
TTCCTTTTAGGAATACGGGTGCTGTCAACAGGTTTGATAGTTAGACTTAAAACTTGAAATTCACTTTTTGGGG
GGAGGGATATACTGAAATAGAGAGTTGAGACTTGCCAGTTGGGGGAAATAGCATTAAAAATGGAAGCTGTGTT
TGGAAAATTGTGTATGAGTATTTTGTATTAAAAACATTTAAAGGCTTTTTTCTTAA

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FIGURE 1379

MEFSIKQSPLSVQSVVKCIKMKQAPEILGSANGKTPSCEVNRECSVFLSKAQLSSSLQEGVMQKFNGHDALPFI
ADKLKDLTSRVFNGEPGAHDAKLRFESQEMKIGITPPNTPPKNGSPBEIKLKITKTYMNGKPLFESSICGDSAAD
VSQSEENQKQKPKENKARRNRKRSIKYDSLLEQGLVEAALVSKISSPSDKKIPAKKESCPNTGRDKDHLLKYNVGD
VMSKVSQYPWWPCMVSAADPLHSHYTKLGQKKSAQYHVQFFGDAPERAWIFEKSLVAFEGEGQFEKLCQESAKQ
APTAKAEIKLLKPISGKLRAQWEMGIVQAEAAASMSVEERKAKFTFLYVGDQLHNPQVAKEAGIAESLGEMAE
SSGVSEAAENPKSVREECIPMKRRRRRAKLCSSAETLESHPDIGKSTFPQKTAEADFRRGVGSPPGRKKTTVSMR
SRKGDAAASQFLVFCQKRRDEVVAEHPDASGEEIEELLRSQWSLLSEKQRARYNTKFLVAPVQAEEDSGNVNGKK
RNHTKRIQDPTEDAEADTPRKRLRTDKHSLRKRDTITDKTARTSYKAMEAASLKSQAATKNLSDACKPLKKR
NRATAASSALGFSSSPASLTENEVS DSPGDEPSESPYESADETQTEVS VSSKKSERGVTAKEYVCQLCEK
PGSLLLCGPGCGAFHLACLGLSRRPEGRFTCECASGVARHSLGSVRMMRGLHSRGPSCLLTGPKESPISRQN
TSWVRKTPGESPRPWQPHSSTSLMGVSVCLPRMISDCSTTGQLLSRRKGLFS

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FIGURE 1380A

TGGTCTTGAACCTCTGACCTTGTGATCCGCTCGCCTCAGCCTCCCAAAGTGCTGGGATTACAGGCATGAGCCACC
GTGCGTGTCTTAGAACCACTGGTAACCTTAACCTGAGACAAAGATTTCCGCATGTTGCCAGGCTGGTCTCGAACT
TCTGAGCTCAAGGCATCTACCTGCGCTCGCTCCCAAAGTTGTGAAATTCAGAGCTGTGAGCCACTGCACCCGGCC
CTTGCCCTCATGTTTGAATGATAATTTACCTGGGCATAAAATTTCTGGACACTTGTGGTGCCAGAGCTGTCTGCTT
TTCTGTGGAGAGCTCGCGGTTGACAGCACCCAGCAGCCCCCTATTGCTGCACGTGAGGTGCTTCCACCTCAGTACT
GTGGACACTTCGGCGGCATACGCCCTGTTGCGCGGCATCTGTGCGTTGCAGGAGATGCAGCAGCATCCATGAC
CGCAACCCATCAGAGTGTCTAAGAACGGAAGCATCTGGGCTGGATGGAATTTAGCATCAAGCAGAGTCCCCCTT
CTGTTTCAGAGTGTGTAAGTGCATAAAGATGAAGCAGGCACAGAAATCCTCGGCAGTGCACCGGGAAGACT
CGAGCTGCGAGGTGAACCGCAGTGTCTGTGTTCTCAGCAAAGCCAGCTCTCCAGTAGCCTGCAGAGAGGGG
TCATGCAGAAAGTTTAAAGCGCCAGCAGCCCTGCCCCCTTATTCCAGCCGACAAAGCTGAAAGATCTTACTTCCCGG
TGTTTAAATGGAGAACCCGCGCACACGATGCCAACTGCGTTTTGAGTCCCAAGAAATGAAAGGGATTGGGACAC
CCCCAACAACCTACCCCTATCAAAAATGGCTCTCCAGAAATTAAGCTGAAATCACCACCAATACATGAATGGGA
AGCCTCTCTTTGAATCTTCCATTGTGGTGACAGTGCTGCTGATGTCTCAGTCAGAAAGAAATGGACAAAAAC
CAGAAAACAAGGCAGAAAGAACAGGAAGAGGAGCATAAAATATGACTCCTTGCTGGAGCAGGCGCTTGTGCAAG
CAGCTCTTGTGTCATAAGATCTCAAGTCTTCAGATAAAAGATTCAGCTAAGAAAGAGTCTTGTGCAAACTGTG
GAGAGACAAAGACCACTGTTGAAATACAACTGGTGGTATTTGGTGTGCTCAAAAGTGTGCGGTACCTTACCTTGGT
GGCCTTGCATGGTTTCTGCAGATCCACTCTTACAGCTATACCAAACCTTAAAGCTCAGAAAGAGTGCAGCGCC
AGTATCAGTACAGTCTTTGGTGACGCCCAAGAGCTTGGATATTTGAGAAGAGCCTGTAGCTTTTGAAG
GAGAAGGACAGTTTGAAGAAATTTGACAGGAAAGTGCACAGCAGCCACAGAAAGCTGAGAAAATTAAGCTAT
TGAAACCAATTTAGGAGAAATTTAGGGGCCAGTGGGAAATGGGCATTGTTCAAGCAGAAAGAGCTGCAAGCATGT
CAGTGGAGAGCGGAAAGCCCAAGTTCACCTTTCTCTATGTGGGGGACAGGCTTCATCTCAACCTCACTCAAGTACCA
AGGAGGCTGGCATTGCTGCAGAGTCTTGGGAGAAATGGCAGAAATCCTCAGGAGTCAAGTGAAGAGCTGCTGAAA
ACCCCAAGTCTGTGAGAGAAAGTGCATTCCTATGAAGAGAAAGCGGAGGGCCAAACTGTGTAGCTCTGCAGAGA
CCCTGGAGAGTCAACCCGACATAGGGAGAGTACTCCTCAAAAGACGCCGACAGGCTGACCCCAAGAGAGGATAG
GGTCTCCTCCTGGGAGGAAAGAACCAAGCTCCTCATGCCACGAAGCAGGAAGGAGATGCAGATCCCAAGTTT
TGGTCTTCTGTCAAAAACACAGGGATGAGGTGGTAGCTGAGCACCCAGATGCTTCAGGTGAGGAGATGAAGAGC
TGCTCAGGTACAGTGGAGTCTGCTGAGTGAGAAACAGAGAGCAGCTACAACCAAGTTTGGCCCTGGTGGCCC
CTGTCCAGGCTGAAGAGACTCTGGTAATGTAAATGGGAAAAAAGAAACACACAAAGGATACAGGACCCCTA
CAGAAGATGCTGAAGCTGAGGACACCCAGGAAAAAGACTCAGGACGGACAGACAGTCTTCGGAGAGAGAGACA
CAATCACTGACAAACCGGCCAGAAAGCTCTTACAAGGCCATGGAGGACGCCCTCTCGCTCAAGAGCCAGCGAG
CAACGAAAATCTGTGCTGATGCACTGTAAACCACTGAAGAAAGCAGAAATCGGGCTTCCAGCGGACATCTTCAGCT
TTGGGTTTAGCAAAAGTTTCATCTCCTTCTGCATCCTTAACCTGAGAATGAGCTTTTGTGGGAGCCACACCAAGTCA
AGTTGGATTGAACCCAGCTGCTGCTGACTGCACCTAGAAATGATGTAATTTCCAGGATGCTGCTGCAGGTGGCG
TATCATCTGACACTCAGTGACATTTCTATCACAACTATTTATGGAAGATGTGATGAATCTGTTTAACTGG
TATTTAAACACATACATGAAGAAAAACAGATAACAAATTTTAAAGCCAAAGTCTCGGACAGCCCGGGAGACGA
GCCCTCGAGAGTCCCATACGAAAGTGACAGCAAAACACAACTGAAGTATCTGTCTCATCAAAAGATCTGAGGC
AGGAGTGACTGCCAAAAGGAGTATGTGTGCCAGCTGTGTGAGAAAGCCGGGAGCCTCCTGCTCTGTGAAGGACC
CTGCTGCGGAGCTTTCCACCTCGCCTGCCCTTGGGCTTCCCGGAGGCCAGAAAGGAGGTTTCCCTGCAGCGAGTG
TGCTCAGGAGTTCATCATGTTTGTGTGTAAAGAGACAGACAGATGTTAAGCGCTGTGTGAGTCACTCAGTG
TGGAAATTTTACCATGAGGCTGTGTGAAAAAATACCTCTGACTGTATTGAGAGCCGAGGTTTCCGCTGCCG
CCTCCACAGCTGTGTGAGCTGCCATGCTTCAACCCCTCAAACCCAAAGCCGTCAAAAGGTAAGATGATGCGG
TGTCGCTGCCCCGTTGCTCATACAGCGGGGATGCTTGTGCGCAGCAGGATGCTCAGTGATCGCCTTCAACAG
CATCATCTGCACTGCCACTTCATGCTCGGAAGGGGAGGACACACACGCCCAAGTCAACGTGAGCTGTGGTCTT
CTGTGCTTCCAAAGGGGGAGCCTTCTGCTGTGAGTCTTCCAGCGGCTTCCACCTGACTGCTGCTGAACAT
CGAGATGCTTACGCGCAGCTGGTTCTGCAATGACTGAGGGCTGGGAAGAGCTGCATCTCCAGATATCATTTG
GGTGAACCTTGGGAATCAGAGTGGTGGCGCGAGAAAGTTTGCATCCCAAAATGTTCCCCCAATATTCAGAA
AATGAAGCAGAGATTTGGAAGATTCCTGTGTTTTCTTGGTCTAAGAGTTATTACTGGAGCATACGCGCG
AGTGTTCCTGTACATGGAGGGGAGCGGGGACGCGCTACCAAGGGGTGCAGAGGATCGGAAGAGTCTTCAAAA

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FIGURE 1380B

CGCACTGCAAGAAGCTGAAGCTCGTTTTCTGTAATTAAGCTTCAGAGGGGAAGCCCGAGAAACACAGGAGAGCGA
GCGCAAGCCCCCACCATACAGACACATCAAGGTGAATAAGCCTTACGGGAAGTTCAGATCTACACAGCGGATAT
TTCAGAAACCCCTAAGTGCACCTGCAAGCCACAGATGAGAACTCCTTGGCTTGTATTCGGAGTGCTTGAACAG
GATGCTGATGTTTGAGTGCCACCCCGAGGTGTGCCCGGGCGAGTTCTGCCAGAACCAGTGCTTACCAGAGCG
CCAGTACCCAGAGACCAAGATCATCAAGACAGATGGCAAAGGGTGGGGCCTGGTGCCTCAAGAGGGACATCAGAAA
GGGAGGATTTTGTAAAGGATGATCTTGGGGAGTGATGCAGAGGAGGAGGTGCATGGCGAGAATCAAGCACGCACA
CGAAGACGACATCACCCACTTCTCATGTCTACTATAGACAAGGACCGTATAATAGACCGTGGCCCCAAGGAA
CTACTCTCGATTTATGAATACAGCTGCCAGCCCACTGTGAGACCTCAAGTGGACAGTGAATGGGGACACTCG
TGTGGGCTGTTTGGCCTGTGTGACATTCTGCGAGGACGGAGCTGACTTTAACTACAACCTCGATTGTCTGGG
CAATGAAAAACCGTTCGCCGGTGTGGAGCCTCCAATTGCAAGTGGATTCCTCGGGGATAGACCAAGACCTCGAC
GACCCCTTCATCAGAGGAAAGGGCAAAAGACCAAGAAGAAACGAGCGCGCGCAGAGCAAAAGGGGAAGGGAA
GAGGCAGTCAGAGGACAGTGCTTCCGCTGCGGTGATGGCGGGCAGCTGGTGTGTGACCGCAAGTCTGCAC
CAAGGCTACACACTGTCTCGCTGGGCTTTGGCAAGCGGCCCTTCGGGAAGTGGGAATGCTCTTGCAATCATG
TGACGTGTGTGGCAAACCTTCGACTTCATTTTGCCACTCTGCCCCAATTCGTTCTGTAAAGAGCACCGAGGACGG
GACAGCCTTCAGCTGCACCCCGGACGGCGGTCTCTACTGCTGTGAGCATGACTTAGGGCGGCATCGGTCAAGAG
CACCAGACTGAGAAGCCCCCCCCAGGACGCCGAAGGGGAAGGGCGGGCGGGCGGAGGGCTCGCGGAG
AGTCACAGAGGGCAATAGCGCCAGGCGGGCGCTTGGCCGATCCAGGGGGCGTGCAGGGCGGGCGGCCCTCCT
GCGGGAGAGGGCGAGCATGAATGCTGCCCCGAGGACCCAGCTCGAGCGCGCAGGACACAGACGATGACCCCTGCC
GGAGGGAGCGCTCCCCACACTGACCTGAGCCATCCTCAGCAGCGTCCGCTGCGTCTGCATGATGACCGCTGAGCC
CAGCTCAGCGTTCCTGGACAAAACGCCCTCACTCCTCAGCGTTACCGCCACACTTGAATTTCTCGGAATGTCAAGG
TTCCCTCCCACTTATTTTGAAGTTAATGGCATATGGAATGTTTAACTCTCCTCTGAATGTGTAG
CGTAGGCTTTCCCAAGGGTTCGTAGAAACTCGTCTTCGCGTTGCCCTTTCTGGCTCTCAGCGCGCTCGCCAC
TCGGGAGAGGCTGGGTGAGGCCGTGTGAGGACTGACCTGGATTCTCTGAACTGCCATTGTGATCATTAATCT
GCTCITTTGGAATGGCTGTATCATTTTTTGTACTAATGTGAATTTGCTCCAGAAACGCTTTCTTTTCATCCTA
GTGAGAAGCTGCCCTGCAGGTGGTGGCAGCAATGGTGTGTGAAGATTTCCTCCGCTAGTTTCTTCTCCTCATGG
ATTTGAATGAAATGCCAATAACACGTCCACTTTCACGCTGTAGTTTACGCGGAGCACTTTCGAGGCGTCCGCGGG
TTGGGCTACTTCTCACCTGGGCTATCTCTGAACCTCGCTAGGTCTTATCAACATTTTGGGGGATAACTTTGTA
TATTTTTTCATTTGGCTTCTCTTACCAGTTTCTGATTTTTATTCTCAATATTTTTTGCATAAACCTATTTCAC
AAATCACACCGCAAGTGTGTGTTTACTGATGCGGCCCTGAGCTCCATGGCGAAAGGAGTGACTTTGACGGG
CGTGAGACCGCAGTCTGCTTAGAGCACAGGAAGTGACAACCTTAGGGAAGCCCGTAGGGCGCTCGAGGCCCGGGG
ACCCAGCAGCTGGGTCTAAAGAGAGACGGAGTCTAGCTCTCGCCACCAAGTGGCTTCCATCTCAGCACTC
TGTGGGTCTGGTGATGGAAGATGCAGTCTCTGCTGATCACAATGCGCTCTGCCAGGSCACCTACTGAGAGGTGC
GTGCTCGGGGGTGAGGCGCTGCTTGGCAGGTGTGCGTGCCTCGTACGTGTGTTATGGGCACCTGCTGAGGCCAGG
TATCAGACCGACTCTCTGTGAGACTTCACTTTAGTTTAAAGGTCCAGTCTACAGAGTGAGACTTATCTAT
CTGAGTACTACATATGTTTAAAGACTTGGTCTTTTTTGAAGGATCCTTGACCTGGGAAGTCTGGAGACCCCT
GAGAAGGGGGCACCATGTGTGCTTTGCCACGCTGTCTGAGGGGTGCTGTCTGGAGGGAGGAGGAACAT
TCAGCAGCAGGTGCTTTTTTATGGGCTTTTTCTTAAGATAACCTAAGGGGACACATCCATCTTGAGAGAGTTT
ACAGAGTCTCCCTTGAAGAACTGCTGCTGAGGCTCCTGTAAATTTCTGTGGGACTTTTATGCGTTGGTAAAA
CTGAGTGTCTTTGGACCTGAGAGTGCCTACTCCGTGGTTTTGTGACCTGGAAGCGGCGGGGTGAGGGGTGTG
GCCTCGAGGGTCCACGCTCCTTGAGCACTGACTGGAAGTTTCACTGGCTGTGGCTGTCCCTTCTCCATCA
GGGTCCCCAGAAAGTTAACTACACAGAGGACCCAGGGGAACGAGCTGTGTGACCACTGCTGCTCGCGGGC
CGTGGGCTCTGAGGGGCACTCGCGGTTAAGACAGGGTGGGAGTAGTCTTTCAGCTTCAGACTTCAACTTCTCC
CAAAGTGTCTTGAAGAAATAGTGATCGGCTCATAGATTTATGCTCCTTATGATGCCCTAACTTGGAAAGTTGT
CTAGGACAGGCGGGGAGTGTGCCACACACCTTAGAGTCGAAGGCCCGAGGGCGGCTGCTCACTGCCCA
AAAGATCCTTCCGCGAGGTAAAGGACTACCAATGCTTACGTCAAACAGCAGAACTGGCTTTCGATGTGACTTT
GGGGGAGCAGATATTAACCTTATTTTGTGTTGGACAGTAGTGAATCTTGTGATTTTAACTCGCTTTGATAATACT
TCCAAATTTATGATTTTCTGAAGGAAATAATGCAACATTTTAAATATGTTTCTCCGCTTTCCAAACACTGT
TAACTTAATGAGCAAGTAACTAATCTTGAATGTCTCTCAATACCCGTTGATAACTCAGTGGAGCCAGGCTTT

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FIGURE 1380C

GGGGTAGCGCCCTGAGCTTGCAAGGTTTCTCGCCACTGGGGCTGACCAGCCCCAGCTGTGACCGTGGGTGTG
GCTGGCTCTCGGCCCTGCCAGCTTTGTTCTGAGGACGTGGTGACTTCCTGAACATCAGCTTCAATCCTCCATCA
TTAATGTGAAGCAAAACACAAAACCGCCCAATCCCTCAGGATTCCCTGGCATCCGAAACCAGCATCTGCACCT
AAACCCATACCCACCCGTGTGCGCCACAGGGGGATGTGTCCGAATGGGCAGCTTAAATGTGGTCACCTGTGGG
GGAAACTCTTCAGGCACCTGAAGTGAGAACCCAGCTGTCCGTCTCAGGCCGGCCTTTCTCCGGCGACACCCGT
CCATGGCTGGCTGGGTCCCCTTCGCAGTGTGTTGCTGTCTTGACATCTAAACCCGGCGTGTGCAGTGCCCATCT
TCCAGGACTACCTTATTTTCCAGAATTAAACCTGTTTTATAATTCAAGTTAATGCAATGACTGTGAGTTGCCAA
ATACTTGTATCCTGTGAGTGTAGTTGATGACTGTTTGTAGTCAGTAGAGTAAATGCTGTGTCCACGGGGTGTG
ACAGCCTCACCATAACCTGTTGAGGTGTGAAATGCCCGTCAGAAATTAATACAAACCTTAAATGTGCTATTGG
TGTCTAAACTTCATACAATGTAAGGTGAGATTCCCTTTTAGGAATACTGGGTGCTGTCAACAGGTTTGATAGTTAG
ACTTAAAAACTTGAAATTCACTTTTTGGGGGGAGGGATATACTGAAATAGAGAGTTGAGACTTGCCAGTTGGGGG
AAAAATAGCATTAAAAATGAAAGCTGTGTTTGAAAAATTGTGTATGAGTATTTTGTATTAAAAACATTTTAAAG
GCTTTTTTCTTAA

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FIGURE 1381

MEFSIKQSPLSVQSVVKCIKMKQAPEILGSANGKTPSCEVNRCSVFLSKAQLSSSLQEGVMQKFNGHDALPFI
ADKLDLTSRVFNGEFGAHDALRFESQEMKIGITPPNTTPIKNGSPEIKLKITKTYMNGKPLFESSICGDSAAD
VSQSEENGQKPKENKARRNRKRSIKYDSLLEQGLVEAALVSKISSPSDKKIPAKKESCPNTGRDKDHLKYNVGD
VNSKVS GYPWWPCMVSAADPLLHSYTKLKGQKKSARQYHVQFFGDAPERAWIFEKSLVAFEGEGQFEKLCQESAKQ
APTAKAEIKLLKPI SGKLAQWEMGIVQAEAAASMSVBERKAKFTFLYVGDQLHLNPQVAKEAGIAAESLGEMAE
SSGVSEEAENPKSVREECIPMKRRRRRAKLCSSAETLESHPDIGKSTPKTAEADPPRRGVSPPPGRKKTIVSMFR
SRKGDAASQFLVFCQKHRDEVVAEHPDASGEEIEELLRSQWSLLSEKQARYNTKFALVAPVQAEEDSGNVNGKK
RNHTKRIQDPTEDAEADTPRKRLRTDKHSLRKRTITDKTARTSSYKAMEAASSLSQAATKNLSDACKPLKKR
NRATAASSALGFSSSSPSASLTENELLWEPTPVKLDLNPAAALYCT

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FIGURE 1382

TAGCGAGGGACGCGTAGGTGTCTTCATAAGATGCCGGGGCAGCGCGCGCTTCCCCAAGATGCGGTCCATG
CGGGAGAGCGACACGGGCTGTGGCTGCACAACAAGCTGGGGGCCACGGACGAGCTGTGGGCGCCGCCACATC
GCGTCCCTGCTCACGGCCGCGTCAACGACAACATCCGCTCTGCTTCCATGGCCTCTCGTCGGCAGTGAAGCTC
AAGTTGCTACTCGGGACGCTGCACCTCCCGCGCCGCACGGTGGACGAGATGAAGGGCGCCCTAATGGAGATCATC
CAGCTCGCCAGCCTCGACTCGGACCCCTGGGTGCTCATGTGTCGCCACATCTTGAAGTCTTTCCGACACAGGC
TCGCTTAACTTGGAGCTGGAGGAGCAGAATCCCAACGTTCAAGATATTTGGGAGAACTTAGAGAAAAGTGGGT
GAGTGTGAAGCGCTGCGCATGCTGCCACTGGAGTGCCAGTACTTGAACAAAAACGCCCTGACGACCTTCGCGGGA
CCCCCTACTCCCCGGTGAAGCATTTCAGTTAAAGCGGAAACCCAAGAGCGCCACGCTGCGGGCGGAGCTGCTG
CAGAAGTCCACGGAGACGCCACGACAGTTGAAGCGGAGCGCGGGGTGCCCTTCCACGCCAAGGGCGGGGGCTG
CTCGGGAAGATGGACACCAACCCCACTCAAAGGCATCCCGAAGCAGGCGCCCTTCAGAAGCCCCACGGCGCCC
AGCGTCTTCAGCCCCACAGGGAACCGGACCCCACTCCGCGCTTCAGGAGCGTGTGCGGAAGGAACGAGGTGTG
AAGCTGCTGGACATCTCTGAGCTGGATATGGTTGGCGTGGCCGAGAGGCGAAGCGGAGAAGGAAGACTCTCGAT
GCGGAGGTGGTGGAGAAGCCGCGCAAGGAGGAAACGGTGGTGGAGAACGCCACCCGGACTACGACGCCGGCCTG
GTGTCCACGCGAGAACTTGGGTCCCTGAACAATGAGCTCGCTGCCCTCCACGAGCTACCTTCCTCCACGCCC
AGCGTGGTTCCCGCCTCTCCTACATCCCCAGCTCCGAGACGCCCCAGCCCCATCTTCCGGGAAGCCAGCCGC
CCACAGAGGAGCCAGCGCCCGGACGCCCAAGTTCAGCAGCGAGTTCAAGCAGCGGGCGCCCATGTACAACAGC
GGCTTGAGCCCTGCCACCCACGCTGCGGCGCCCACTCGCCTTGACACCCACCAACCTCCGGCTGTGCGC
CCTACCACTCAGACACCCCGGTTGCCATGGTGGCCCCGACAGCCAGGCCCTGTCTCAGCAGAGCCTAAGAAG
AACCCTGCCCTCAGAGAGAGCAGATGTTGCTGCCCCAGGAGATGTTCAAGACGGCCAAACAAGTACAGCGGCC
GAGAAGGCCCTCATCTGGGCTTATGGCGGCTCCCGAGAGAACCCGTGCCAGGAGCAGGGGGACGTGATCCAG
ATCAAGCTGAGCGACACACGAGGACCTGCCAAGGCGGACGGCCAGGCTAGCACAACCATGCTGTGGTGACACA
GTGTTTGAGATGAATATGCCACGGGCCAGTGGACGCGCTTCAAGAAGTACAAGCCCATGACCAATGTGTCTTAG

AACCACCTGCCTCAGAGCTGSCCGTCACTTGTGGGGTCCACGGGACGATGGCTTTGCCAGCTTAAAGTAACCGG
ATGGCGGACACCTGGCCCCCGAGGTCGCCCGCGCGCCTGCTGCTGACCCAGCCTGTTTTAAGTTCTGGATG
CATTTCTCTGGGGTATTTGGGGCTTATTTTAAAAATTTAATATGGGTCTTTTTGTGTGATTTAAAGACACTT
TTTGACTCAACGTTACATTTTGAATGTAGTAAGTAAATTAACCAAAAAAGTTACAACCTCCTAATTTTAGTGA
CAGCTCTGCTGTTTTGTAGACTCTTACTTTTTAAATCTTTTCTATTTTCCCTCGCTGGGCGAGTGCCCTCCTA
CCCCAGGGTTGAGGGGACCAAGGTGGACAGGTGGTACTGGGGGTGCGGAGGAGACCCGACACACAGAGCG
TGGGAGACGGTGGGCTTGTCCCTGCCTGTGCTGCGCTGGGAGTTTTGTATTCATCTTTGTATAGTTGTGGAC
ATTTAAGACAGCTTTGGGTACCTATTTTATTGTAAACTATCTGAACCATTAAGATCGAGCTTTCTAAGAA
AAAAAAAAAAAA

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FIGURE 1383

MASMRSDTGLWLNKLGATDELWAPPSIASLLTAAVIDNIRLCFHGLSSAVKLLKLLGTLHLPRRTVDEMKGAL
MEIIQLASLDSDPWVLMVADILKSFPDTGSLNLEEEQNPVQDILGELREKVGECEASAMLPLECYLNKNALT
TLAGPLTPFVKHFQKRRPKSATLRAELLQKSTETAQQLKRSAGVFFHAKGRGLLRKMDTTPLKGIPKQAPFRS
PTAPSVFSPTGNRTPIPPSRTLLRKERGKLLDISELDMVGAGREKRRRKTLD AEVVEKPAKEETVVENATPDY
AAGLVSTQKLGSLNNEPALFSTSYLPSTPSVVPASSYIPSSSETPPAPSSREASRPPEEPSAPSTLPAQFKQRAP
MYNSGLSPATPTPAAPTSLPTTPPPAVAPTQTTPPVAMVAPQTQAPAQQPKKNLSLTREQMFQAQEMFKTANK
VTRPEKALILGFMAGSRENPCQEQGDVIQIKLSEHTEDLPKADGGSTTMLVDTVFEMNYATGQWTRFKKYPMT
NVS

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FIGURE 1384A

TCCCAGCCTGA AACCAACACATTTTCTAATAAGTTATTAGACAGAAATAGCACTCTGCATGACITTAATTCCTGG
GACAAAAACGGTAGTTTGTACCCCTAAGACACAGTTTCTGGCCCCAGTGTGATGGGGGTGGGTGGCCGGGTGGGTGGA
GCGTTTTGCTGTGTGGAAACCTGGAGGGAAACCCCTGATTGGATGTCAITTTCTGCGATGGACAGCCTCCCAAGC
CTGGCCTGCAGGGTGGGCAAGGCTGGGGGGCAAGGAGTCCGCAGCCTCCGGGAGGAGGGGCAGGGCGCTGCCTTG
GGCTGGGTGGGAAGGGGTGGCCGCCCTCGGCTTCGCTGGCCATGCTCCTGGTCTCTCCTTCTCGAGGTACACAG
GCAGACCCCTGGACGGGGGGGGGGGGGTGGCTGGAAAGGGGAGACAGAGGTGGAGGGTGGCACAGGCTG
CACATTACGCTTAGAAGTGGACCTGGCTTTGGTGGCAGGAGAAGAAATAAACACTTGCCCAAGCCCTTTGTGTGG
GGGAATTGGGAGGGGTCTGTGGCAGGCAGGGTGGGCCACGGAACCTGGTCCAGGCATCAAGGCCACGCTGCAGGG
CCATGGAGGGATGCTTCTCACGAGCGCTTTCAGAAGCGAGCGAAGGACAGAGAAGCCCTGCTCTCAAGGGCCCTT
TTGCTCTGTAGCAATTAGAGGTGTGCAGAGCACTGTACAGACCCCACTCCCTGTACATTCTCTCCCTGGAGGTGC
CCGGTCCCGCTTGGGGATGGGAGTTTTGTAGACTGTACAGAAATCGGCACCCCTATTTCCTTGAGACTCAGATT
TGTTAATCTGGAATATACAGACAGACGTAAGATGTTTTAGCAAAATGGAAACAAAGTTGTGGCTTTTCTCTCT
TTTGGTTTGGTTTGGGTTTGGCCTGGGGCTGGTCCAGTTGGTGCGGGGCATGCTGGGGCAGGAGGGCAGGGC
GGGCCAGGTGGAGTCAGGCTCTGGGGGTGTATGTGCGGGGTGCTGCCAGCGTCCCTTGGTCTCTGSCCTTTGGAG
CCTCGGGCTCCCTGGGTTGCAAGGTTGCTTGGGGGTGGCTGTGGAGCCCAAGCAGCCGAGGGCGAGGGCTGGAGGC
CCAGGACCTGAGTGTCTCTTGTATATTGATCCTAGCAGATCCCCCTCTCTGGGGGTCTTGAGAGTCTCTGGGCAG
TGTGGCCTTCTCTCAATTCTGGTGGCATCTGCGCCCGTGTGAGTACCTCTTCCTTGGCTGCATGCCCTGTGGGTGTG
TGAGACGCTTGGCCCTTTTTTGTGCTGCCAGGACTTGGTAGAGATGGCAGGAGGGTGTGCGGGGTGGTTGTGTG
CAGAAACCTTGCCGCCCTCAGGTGAGCAGAGGCACTGGTGTGCTGCCAGGTGGGGCGGAGCTGCCCGGAACCTT
TGCCAGGCCAATGTGTAGCTTGGTGGCGCCCTTGAAGGCCACTGGGGGGTAGTGTGTCTCCCGGGGCTTGA
GGCCGGGTGCTGGTGGTGGGCTGACCTGGCCCACTCATCCCTCAGCGCTGGGATCTCACTGCTGTGCACT
GTGCACTGACGTGAATTTTATACGTTTGTAGAAACTCTGATGTAACTTCTTCTACCTCTGAAGCGCCCTCTCTGG
CCTGCTGTACGTTGGCTGGTGGCGCTTCCCGAGTGTGCGCCCTTGCCCGCTCCCATGGGACCCCACTC
AAACTCTGCTGTGGAGGCCCGGGGAAAGCCAGGCCCGGGCCCTAGCACTGCTCAGGGGCTGGGGCTCTGGGAT
TTCTGTGTTTGGAAAGCTCTGTTTTGGAGTGGGGGGCGTGGAAAGCGGGAGGGGCTGACAGTGCCTGGGGCC
AGAGCTGGGCGAAGGAGGACCTCTCACTGGACGACACTGCAGGCCCTGACAGAGGCTCCGGGCACTGAGGGC
TGAAGCGCTCGGGATGCCCACTGCCCAGAGCCACGGGTCTTGTGTGCTGGGGGTGGGGTGGCCCCAGGCA
GCTGCCACTGCCAGGTGTGAGTCGCTGCAGACCTGGTCCCTGAGGTTGGGAGGCTGCTTGTGCTGAAGCTGCC
ATGTGCTCTGGCCCCAGAAAGGCTCTGAGCGTAGGGAGTTGAGCCCCGACGCTTGGCGGCATCTCTCTCTC
TTCTTCCGCCCATGCCAGCCTTGTCTCCGGCTGGTGGCATGCTTGGGGCTGGGCGACAGGTTGAGAAGCTGCC
CCCGGAGGGAGGGGGCCAAAGGCTGGTCACTTGGCTGAGGGGTGGATGGCTGCGCCCGGCAAGGCTGGGCTGGG
TGGGAGGCCCTTGGGACGACGAGGCTGAGGCCACAGAGTCTCTGGGGCCACCCCTCTCTGCTCTGGGTGCTCTT
TCAGAGAAGATGGCAGAAGGCTGACGGCCCTAGAGGGGACGACGGGCTGGGGACGCCCTGAGCTTCTGGCTGTG
TGGCAGCTCTGGGGAAGCTCTCTGGGCCATAGGGACCTGGCTCCCTTGCAGAGCCCGGCTGACCTCCGCGCAC
CCAGGGCTGTGCTGGTGGCTGAGGCTGGGAACTTGGTTCTGGGCTCTGCTGGGCGCTGGGCTTTGTGGGGG
CGAAGTGGTTGCCCGCGGGCGAGGGGCTGTGTGGGCCACTCTGTGGGCCACTTCTGTCTAGTGCACGAGGGA
CGGTGGGACAGTTGCCCTTGGCCCAAGGAGGACCTGCACTCCCCCTGGGCTGGCGCTGCATGCGGCACCCCT
GTGTTGCCCTGCTGACTTGTCTTATGTCTGTTTGAAGCTGCTTCTGTTTGGCCACAGGCTGTGTTCTCTGGGCTGA
TGGCCACAGAGCTGACACTTGGGGTTTGTGTTCCAGACTTGCAGACCTGGGATGGGATCTCTCCGCGCAC
GGCTGCTGTGCTTCCAGAGGTGGCGTGTGCTCCCGGGCCACGGTGGGGTGAAGGATGGCAGGCGGACATAC
CATTTGTGGATGTATTTTTTAAACAGCAATAATTAGCCATTTAAAGGAGGGATGTACCTGTGTGTGTCAT
GTGCACGTTGTTGAGCGTGTGTGTGTGTGCAAGTGGGTTCTTGGATGTGTGATGTGAGCATGTGTGTCATGT
GTGAGCCTGTGCACGTGCATGTGTGTAGGTGCAATAGCATGTACACGCGTGAAGCATGCATGTGCGGTGTACACGTGT
ATAGGTGTATGCTGATGAGTTGTGTGTACATGCGTGAACGCTGTATAGTGTGTGTGTGGCATGTGTGTG
GTGTACATGTGTTTGTGCTTGGGTATGCATAAGCATGCACGTGTGTATGAATGTGCGTGTGTATGCATGAGC
GTATGCATGTGTGTATGCGCATGTGTTCTGTGTACTTCTGTAGGGGGCACATATGTATGAGTGTATGAGTGCATAC
ATATGCATATGTGTGTGTGTGTGTACTTTGTGTGTGGGCATGTATGCTATGAGTACTTGTGTGGCTGGTGT
ATGGTGTAGCATGCATGTGTATGGATGCATATGTGAGCTGTACATGTAGAGTGTACATGTGTGTGTGATGAGC

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FIGURE 1384B

ATGCATGCGTGCGAGTGCCCTGTGTGTGTTGTCATATATGTGGCTGTGCAGGTACCCGGCGGTGGTGGGGCTGGC
AGTGCCCGGGGAAGCAGGTCTGCTCAGGCTTCCCTGCTGGGCCCCAGGCCCGGGCTGAGCCTCCCTGGCCCC
TCTTGCCCCCTCAGTGGAGCAGGGCCTGGGTGGAGGGCCTGGGCAGCTCCAGGGCAGGTCCGGGGAGGCCAGGCTT
GGGGAGCACAGGGGGTGGGGTTACCTGCTGCTGTTTGTTCCTCGAACTGTACTGTGAGCCACGGCGGGGGCAG
ATTGTTCTGAGGCCCCAGATGTGCCAAAACAGCCCCAGGGTGGGGGCGAGCGAGTTCTGAGGAGAGGGGCTGCG
GGGGCCGGGGTGGGTGTGTGCCCCCTCCCTGAATGGCCCCCAATGCTGCTGTTTTTCAATAAAACCAGAGTTGA
AGGC

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FIGURE 1385

MSMHACECLCVYLHICGCAGTRRWAGSARGSRSCSRLPCWAPGPGLSLPGPSCP SVEQGLGGGPGQLQGRSGEA
RLGEHRGWGSPAAVCSRNCTVSPRRGQIVLRPQMCQNSPQGGGERVLRGAAGAGGGCVLP

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FIGURE 1386

GAGGAGCTCTCCTGGCGGCTGAAGAAGGAGCTTCTTCCGGAGTGC GAAGGCGGTGGCGCTGCGGACCTAAC
TAGCTCCAGGTTAGCGCGAGCTTTCGCGGAAAGCAGCGGACTTGA AAAATCTGGAATCTGTCCGGATCCAAAT
ATTTTGCAAGCCAGATGATACCAGAGGGCATGAAAGGTTGAGAACATTTGACTTCCCTGCAACCTTGGTATA
GATCACTTCCCTTTCTGTAGGAAAGGAAAGCCACAAAGAGCACAATGAGTACAGAAAGCGTCTGTGGTGGAGCA
ATRAATTTCTAGACAAGCTCAGAAGCGAACTCGGGAAGCAACCTCCACCCCGAGATCTCCTTGAAGCAGAACCC
ATAGAATCTGTGGAACTGCTGGAGATGAAATTTGGGACCTC ACTTGTGAATCTTTAGAGCCTGTGGTGGTTGAT
CTGACTCACAATGACTCTGTTGTGATTGTGACGAAAGAAAGACCAAGGAGGAATGCTAGGAGGCTGCCCGAC
GACCATGCTGACAGCTGTGTGGTGAGCAGTGACGATGAGGAGTTGTCCAGGGACAGAGACGTATATGTGACTACC
CATACTCCCGAGAAAGCCAGGGATGAGGGCGCTACAGGCCTCAGGCCCTCAGGTACTGTCA GTTGTGCCATCTGC
ATGGACGGATACTCAGAGATCGTGCAAAATGGAAGCTCATCTGTTTCCACAGAATGCGGCCATGTCTCTGTAGC
CAGTGCCCTCCGTGATTCCCTGAGAATGCTAATACTTGCCCAACTTGTAGGAAAAGATCAACCAACCGGTAC
CACCCCATTTATATATGAGTATTGAGAGCCCCCAGGAGAGACGGATGGACAGACAGACAGCCAGGTTCTCCAG
TGGTATCTGCCTCCATTTTCCGTGAGATCAAAAAGACTGTTTCGAAACCAACATCTGATATGTA AACTGCTCTTTT
GTTTCCAACCCCTTCCCTTTTGTATCTCCAGTTTGATGCTATGGCGCTGGACCCAGGGCCCTCCAGGCCATCTC
TGTTCTCTGGGGTGGTCCAGTTCTAGAGTGGGAGAAAGGAGTCAAGCGCATTTGGAATCGTGGTTCCAGTCTG
GTTGCAGAATCTGCACATTTGCCAAGAAATTTTCCCTGTTGGAAAGTTTGCCCGAGCTTCCCGGGCACACCC
CTTTTGTCCCAAGTGCTCGCCGTCGACCAATCTGCCTGCCACACATTGACCAAGCGACAGCCCGGTTCCACCGC
TCGAGGATCCAGGTTGAAGATGGCCCCCTTGAGGCCCTGGAAGACCAATCTGATATGTA AACTGCTCTTTT
CAGAGGTACCCCGTGATTCTGCCTGCACCTTATCATTTGATCTGCAGTGATTCTTGCAAAATCAAGAGAACTCTGC
AGGGCATCCCTCTGTTTCCCTAAGAACGAAAAAGTGCAATAAGGCCATTCGTTACCTACTTTTCAGCAGCCAC
AGATGTAGCACTATTAGTGTCCTCCCTCAGAGGCTTAATGTTGCCGTGGAGCAGTGCCCATCCAGCCCGCTTCT
GCCACCAAGTTGTTCTCAGGAACCTTACCCATGCTCCAGCGTCCCTCAGCTGGCAGGACATGCAAGATAAATA
GGGCAGGCACGTGTTTGGGTGCTCTCTTTTCTGATAAAATCCATCCCGTGTGTTGCCACAGCCCTCCAGTCTC
CAGTTCCTCCACTGCCATAACGTCTGCCCCCGTGTAGATACTGAGAGGTGGTGAGTAAATGTTGGCCCTTACAGCG
CTCAGTTCAGGCTTTTGGCCAGGTCACTGTTGCCCATGTTGCGAGAACCTGCCCCACTGTCTTGGCTTTCTC
ATCCTTCCCAACCCAGTGCCGTTTATTCAGAAGCTTCTTGCCCACTGGGCTTGGATGCTTCGGGCTTCTGACTG
CTCCATAGGTTTGTACTGTGTAACAGGGGCCAGATGACAACCTCTCCTTCTGCTCCACAGGTACGCGGGAGCCT
CAGGTTCTCTCAGGGGCGAGCAAGTGGCCCAAGCTGCCCTTGACAGCAGAGGCCCTGGGGGTGGCTAACGAGAG
GGCCTTACAGTGGCGGATGCTCTCTTCCACTGTGCTCTTCTCAGAGGGGCTCAGCCAAACCAACCGGCT
TTTCGTGTGAACATCTTCAGGCGGGAAAGGGGCCACTTCTGGCTTTGTAGCAATACTGACCTTCAGTTTAC
CCTTCTGAAGAGCAGGGACTCAGCAGCAATTCACTTTAGACGGGCTGAAGGAGTGTCCCTCTCTATGTGA
AAGAAAATGTTTTATCTTCACTTCTGACTTTTTAACTGTTTGGCTCACTTCCAGTTAGTTGAATGAAATTAAT
AATTTCTACTTTGAGTTGAAAGGGGCAAGATCCGAGCTCTCATATTGTGATGTGTAGCATGTCTGCCCTCTG
ACTGGACATCACTGGCATTAACTTCTTCTGGGCATCAGCGAGTGTACAGTGGCCAGACTTGGACAGGCCAA
CCTTGGAGTCAGTCCACTATAAAATATGTTAACCCCAATTTTAAATTTAAGTTTGTCTTAAAGCAACCTC
AGTGGTTAATATAAAAGTTGTGTTACTTCTGCTTAAATTTGATAGAAATTTAAATGTTGTTTGTGTT
CTACTATTCAAGAACTGCAACTAGGGAAAGTTGGTATGAAAAATGCTTTTCCCTTTTCAATGTACATAGTT
CAACTCTTTCTTGTGTACATTTAACTATATCCATGGATATCAGTCTGCTTTGGACTCTCTGCTAGTGTACAG
ATGGAATAAAACCATTAATTTGAACCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1387

MSTRKRRGGAINSRQAQKRTREATSTPEISLEAEPIELVETAGDEIVDLTCESEFVVVDLTHNDSVVIDERR
PRRNARLPQDHADSCVSSDDEELSRDRDVYVTTHTPRNARDEGATGLRPSGTVSCPICMDGYSEIVQNGRLIV
STECGHVFCSQLRDSLKNANTCPTCRKKINHCRYHPIYI

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FIGURE 1388A

CGGCGCGCTCGCCGGCCGAGGTTGGGATCCGAGGCCCTCTCCAGTCCGCGAGGGGCGCACCACCGGCCCGCTCTCGC
CCGCGCGCCGGGGAGGTGGAGCAGCAGCGCAGCTGTTAGGAACCTAGAAAGATTGTACAAAGTAAGTGGTGATTCTG
AGCTCTGCGGTGGTGACTCACCCGCCCGACCACAGCCCTCACAGGAGAGGAGTACTTCGACCGATAGATGAG
AACAAACCAGAGTACTTGAAGGAGAGGAACATGGCACCAGACCTTCGCCAGGACTTCAACATGATGGAGCAAAAG
AAGAGGGTGTCATGATTCTGCAAAAGCCCTGCTTTCTGTGAAGAATTGGAAATCAATGATACAGGAGCAATTTAAG
AAGGGGAAGAAACCCCAAGCCCTATTGGCATTACAGCAGATTGCGAGATTTTATGACCAGGAATGTACCAATGTCT
TACCCAGCAGCTCCGCAAGGAGGATGGCTGCCTTAAACATGAGTCTTGGTATGGTGACTCCTGTGAACGATCTT
AGAGGATCTGATTCTATTGCGTATGACAAAGGAGAGAAGTTATTACGGTGTAATTTGGCAGCGCTTTATAGACTA
GCAGATCTCTTTGGGTGGTCTCAGCTTATCTACAATCATATCACAAACCAGAGTGAACCTCGAGCAGGAACACTTC
CTCATTTGTCCTTTTGGGCTCTTTACAGTGAAGTGACTGCATCCAGTTTGGTTAAGATCAATCTACAAGGAGAT
ATAGTAGATCGTGGAAAGCACTAATCTGGGAGTGAATCAGGCCGGCTTCACTTACACTCTGCAATTTATGCTGCA
CGCCCGGACGTGAAGTGCCTGCTGCACATTACACCCAGCAGGGGCTCGGCTCTGCAATGAATGTGGCCTC
TTGCCAATCTCCCGGAGGCGCTTTCCCTTGGAGAAGTGGCTTATCATGACTACCATTGGCATTTCTGGTTGATGAA
GAGGAAAAAGTTTTGATTAGAAAAATCTGGGGCTAAAAAGCAAGGTTCTTATTCTCCGGAACCATGGGCTCGTG
TCAGTTGGAGAGAGCGTTGAGGAGCCCTTATTACATCCATAACCTTGTGGTTGCCCTGTGAGATCCAGGTTTGA
ACTCTGGCCAGTGGAGGAGGACAGACAACCTTAGTCTGCTGAATCTGAGAAGTACAAAGCCAAAGTCCCGTTCC
CCAGGGTCTCGGTAGGGAAGGCACTGGATCGCTCCCAAGTGGCAGATTGGTGAGCAGGAATTTGAAGCCCTC
ATCGGATGCTCGATAATCTGGGCTACAGAACTGGCTACCTCTTATCGATACCTTGTCTGAGAGAGAAGTCTAAA
AAATACAGCGATGTGGAGGTTCCCTGAGTGTCACAGGTTACTCCTTTGCTAGTGACGGTGATTCTGGGCACTTCG
TCCCCACTCAGACAGATTTCAGAAGCAGCAGCGGGAGAAGACAAGATGGCTGAACCTCTGGCCGGGGCAGCGAA
GCTTCCGAGGAAGGCGAATGGAAGCAGTCCCAAGTCGAAGACTAAGTGACTGAAGAGGATGGACAATAGAACT
TCCACCTCTGCTGCTCCCTAACCTGTTTGTTCATTTGAACACTAACCCAAAAGAGGTCAGAGAGATGAGGAACAAG
ATCCGAGAGCAGAAATTTACAGGACATTAAGACGGCTGGCCCTCAGTCCCAGGTTTTGTGTGGTGTAGTGATGGAC
AGGAGCCTCGTCCAGGGAGAGGTGGTGACGGCTCCAAGGCCATCATTGAAAAGGAGTACAGCCCCAGCTCATT
GTGAGCACCACGGGCCCAACCCCTTACCACACTCAGACCCGTGAGCTGGAGGATACCGAGGAGGTGGAG
AGGAAGCAGAAGGGCTGTGAAGAAATTTGGACGAGGCTAGAGAACAGAAAAGAGTCTCTCCAGACAGCCCT
GCGGTCCCCACCCCGCTCCAGCACTCCCATCAAGCTGGAGGAAGGAGACGGATGCGCTAGAGAGTACCTGTTA
CCCTAAACCTTGTGCCGAGCCGACTACTGGAGATGACAGTGATGCTGCCACCTTTAAGCCAATCTCCCCGATCT
GCTCCCTGATGAACCTTTCAGAACTCGGCTTCCCAATGTAGAGAAGGAGGGAAGCCCAATGACCCCAAG
CCCCACTGAGGCCCTTACTGAGGCCAGCCCGAGCCAGCCCGCAGCCAGCCCGGTGGCTGAAGAGGCTGGCCC
CTCAGCTGTGAGGAGGGGGCGCCGCGGACCTTGGCAGCGATGGGTCTCCAGGCAAGTCCCCGTCAAGACAGAA
GAAGAAGTTCCGTACCCCGTCTTTCTGAAGAAGAGCAAGAAGAAGTGACTCCTGAAAGCCCTGCGCTAACAC
TGTCCTGTCCGGAGCGACCTGGCTCTGCCAGCGCTCCCGGCCAGCTGTGTGCTGTGCTTGTGTAAATGGAATG
CAAAAAGCCAAAGCCCTTCGCGCTAGAGGTCCCTCAGTGACCCAGCCGGCTGTAGCCGAGGCTGACCCAGTGTG
TGCTCAGCAGCCCCACCCACCTGCCCTTGTCTCTCAGAGCCTCAGCTTCTGGGGAGACATGCTCTCCCCA
CAGGGGGGAGGCACTAAGTCACTGGTCTGGCTGGAAGTACTGAAGCCTCTGCGACTTGGCTCAGCTCACCC
TCTTGAGCTCACCTTTCTGCGCGTCCCTCCTGTTGTGAAATAGGCAATTTGCTGTGCTTGGCTTCCCCCTCC
ACCTTAAAGTCTCAGGTGACGAGCTCAGACTCCTGGCTTATGTGGCATTCTCTTGCTCAGTGAATCTCACTTAA
ACTTATATAGAGCCTTGGTCCGCTGAAACACTCGTGTGCCCAACAGCGGCTTGAAGAGGTAATCTGGGCC
AGATGCTGGGCAGGAAACCCAGCGGAGATGGGCTGTGTGACCCAAAGCTGATGCTATGATGCTGACGAGC
GATCCCTCGACCAGAATCAGATTCAAGAGCTCAGTTCTTTTCACTTGGGCTCTGGATTCTCTGTCTATAGGAA
GGTATATCAGGAGGGAAGAGGCTTTCTAGAAATTTCTTGAAGAGGTTTACAATTTAGTCTTAACTTTTTCGAC
TGTGAACCTGGAATAGGCTGCTTTTGTCTTTCTTCCAGACCCCAAGATAGAGCACTTTTCACTTATTTGGGG
GAGGCTTCAAGGAGCTGTTCTCACCTTAACCTCAGCAGAAAGATGCCCTAGTTGTGATCAAGAGTAACTCGAGGT
GGAGGGTAGCCCTGGGGCCCCCTCGACATCACCGTCAATTGATGAGGCTGAACCGTGTGCTCTCGGCAGATGCTG
TTGTGTTACTTCTCCCTCAAGAGGCTGGAAAAGGGCTCAGAGTGTCTGAGCAGGAACCCGGAGGGTGGACCAATTT
AGGAGGTGCCGGTACCAAGCTGACTAGGTACAGGCAAGCTTGTGTGGGCCCAACAGCCGCTTGTGATAGCTGGTG
CCAGATGTGGGCTCAGATCCTGGGCATGATGGGCCGAGCCACCTCGGATCCCATGATTGGCCAGCCGAGCAGA

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FIGURE 1388B

ACCAGGCTGCTGCATGGCACTGACCGCGCTTCCAGCTTCCTCTGAGCCGCAGGGCCTGCTACGCGGGCAAGCGT
GCTGCCTCTCTTCTGTGTCGTTTTGTGGCAAGGCAGAATGAAAAGTCCTTAACCGTGGACTCTTCCTTTATCCC
CTCCTTTACCCACATATGCAATGACTTTTAATTTTCACTTTGTAGTTTAATCCTTTGTATTACAACATGAAAT
ATAGTTGCATATATGGACCCGACTTGGGAGGACAGGTCTGAATGTCCTTCTCCAGTGTAACATGTTTACTC
ACAAATAAAATTCTTTCAGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1389

MNGDSRAAVVTSPPPTTAPHKERYFDRVDENNPEYLRENNMAPDLRQDFNMMEQKKRVSMILQSPAFCEELESMI
QEQFKKGKNPTGLLALQQIADFMTTNVPNVYPAAPQGGMAALNMSLGMVTPVNDLRGSDSIAYDKGEKLLRCKLA
AFYRLADLFGWSQLIYNHITRVNSEQEHFLIVPFGLLYSEVTASSLVKINLQGDIVDRGSTNLGVNQAGFTLHS
AIYAARPDKCVVHIHTPAGAAVSAMKCGLLPISPEALSLGEVAYHDYHGILVDEEEKVLIQKNLGPCKSVLILR
NHGLVSVGESVEEAFYYIHNLVVACEIQVRTLASAGGPDNLVLLNPEKYKAKSRSPGSPVGEETGSPFKWQICEQ
EFEALMRMLDNLGYRTGYPYRYPALREKSKKYSDEVPAVVTGYSFASDGDSGTCSPLRHSFQKQREKTRWLS
GRGDEASEEGQNGSSPKSKTKWTKEDGHRSTSAVENLFFVLNTNPKEVQEMRNKIREQNLQDIKTAGPQSQVLC
GVVMDRSLVQGELVTASKAIIKEYQPHIVSTTGNPFITLTDRELEYRREVERKQKCEENLDEAREQKEKS
PPDQPAVPHPPPSTPIKLEEGDGCAREYLLP

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FIGURE 1390A

CGGCGCGCTCGCCGGCCGAGGTGGGATCCCGAGGCCCTCTCCAGTCCGCGGAGGGCGCACCCGCGCCGCTCTCGC
CGCCGCGCGCCGGGAGGTGGAGACGAGCGCAGCTGTTAGGAACCTAGAAAGATTGTACATGAATGGTGATTCT
CGTGCTCGCGGTGGTGAACCTCACACCCCGACCCACAGCCCTCACAAAGGAGGGTACTTCGACCGGATGATAGAG
AACAAACCAGAGTACTTGAGGGAGAGGAACATGGCACCAGACCTTCGCCAGGACTTCAAATGATGGAGCAAAAG
AAGAGGGTGTCCATGATTCTGCAAAAGCCCTGCTTTCTGTGAAGAATTGGAATCAATGATACAGGAGCAATTAAAG
AAGGGGAAGAACCCCAAGCCCTATTGGCATTACAGCAGATTGCAGATTTATGACCAAGAAATGTACCAAAATGTC
TACCCAGCAGCTCCGCAAGGAGGGATGGCTGCCTTAAACATGAGTCTTGGTATGGTGACTCCTGTGAACGATCTT
AGAGGATCTGATTCTATTGGTATGACAAAGGAGAGAAGTTATTACGGTGTAAATTGGCAGCGTTTTATAGACTA
GCAGATCTCTTTGGGTGGTCTCAGCTTATCTACAATCATATCACAACCAGAGTGAACCTCGAGCAGGAACTCTC
CTCATTGTCCCTTTTGGGCTCTTTACAGTGAAGTGAAGTGCATCCAGTTTGGTTAAGATCAATCTACAAGGAGAT
ATAGTAGATCGTGGAGCACTAATCTGGGAGTGAATCAGGCCGCGCTTCACTTACACTCTGCAATTTATGCTGCA
CGCCCGGACGTGAAGTGGCTCGTGCACTTACACCCAGCAGAGGGGCTCGGGTCTCTGCAATGAAATGTGGCCCT
TTGCCAATCTCCCCGAGGCGCTTTCCCTTGGAGAAGTGGCTTATCATGACTACCATGGCAATCTGTTTGAATGAA
GAGGAAAAAGTTTTGATTACAGAAAAATCTGGGGCCCTAAAAGCAAGGTTCTTATTCTCCGGAACCATGGGCTCTGTG
TCAGTTGGAGAGAGCGTTGAGGAGGCCCTTCTATTACATCCATAACCTTGTGGTTGCCTGTGAGATCCAGGTTGGA
ACTCTGGCCAGTGGAGGAGACAGACAACCTTAGTCTGCTGAATCTGAGAGTACAAGGCAAGCTCCGCTTCC
CCAGGGTCTCCGGTAGGGGAAGGCATGGATCGCCTCCCAAGTGGCAGATTGGTGAGCAGGAATTTGAAGCCCTC
ATGGGGATGCTCGATAATCTGGGCTACAGAACTGGCTACCTTATCGATACCTGCTCTGAGAGAGAAGTCTAAA
AAATACGCGATGTGGAGGTTCTGCTAGTGTACAGGTTACTCCTTGTGATGACGGTGATTCTGGGCACTTGC
TCCCACTACAGACAGATTTCAGAAAGCAGCAGCGGGAGAAGACAAGATGGTGAACCTTGGCCGGGGCGACGAA
GCTTCCGAGGAAGGGCGAAGTGAAGCAGTCCCAAGTCAAGACTAAGGTGTGGACGAACTTACACACAGCACT
GTGAAACCCCTTGTCTCAGTCTCTCTCGTCCGGTGTCTGCGTGCCAAAGCTGTATTACCAACTGCTGTGGACTAAA
GAGGATGGACATAGAACTTCCACCTCTGCTGTCCCTAACCTGTTTGTTCATTGAACACTAACCCAAAAGAGGTC
CAGGAGTAGGGAACAAGATCCGAGAGCAGAAATTTACAGGACATTAAGACGGCTGGCCCTCAGTCCCGAGTTTG
TGTGGTGTAGTGAATGGACAGGAGCCTCGTCCAGGGAGAGCTGGTGACGGCCCTCCAAGGCCATCATTTGAAAAGGAG
TACCAGCCCCACGTATTGTGAGCACACCGGCCCCCAACCCCTTACCACACTGACAGACCGTGAGCTGGAGGAG
TACCGAGGGAGGTGGAGAGGAAGCAGAGGGCTGTGAAGAGAACTCTGGACGAGGCTAGAGAACAGAAAGAAAAG
AGTCTCTCAACACAGCCTGCGGTCGCCACCCGCTCCAGCACTCCCATCAAGCTGGAGGAAGACCTTGTGCCG
GAGCCGACTACTGGAGATGACAGTGAATGCTGCCACCTTAAAGCCAACCTCTCCCGACTGTCCCCGTGATGAACCT
TCAGAAGCACICGGCTTCCCAATGTTAGAGAAGGAGGAGGAAGCCCATAGACCCCCAAGCCCACTCAGGGCCCT
ACTGAGGCCAGCCCCGAGCCAGCCAGACCCAGCCGCTGGCTGGAAGAGGCTGCCCTCAGTGTCTGAGGAG
GGGGCGCCGCGGACCTTGGACCGCATGGGTTCTCCAGGCAAGTCCCGTCCAAAAAGAGAAGAAGTTCCGTACC
CGCTCTTTCTGAAGAAGAGCAAGAAGAGAGTGACTCTTGAAGGCCCTGGCTTAACACTGTCTCTGCGGAGCG
ACCTTGAGCTCTCGACGCTTCGCCGCCACGCTCTGTGCTGTCTGTGTAATGGAATGCAAAAAGCCAAAGCT
TCCGCTAGAGGTCCCTCAGGTGACAGGCCCGGTGTAGCCCGGGCTGACCCAGTGTGTGCTCAGCAGCCCCAC
CCCACCTCGCCCTTGTCTCTCAGAGCCTCAGCTTCTGGGGAGACATGCTCTCCCAACAGGGGGAGGCACTA
AGTCAATGGTCTGGCTGGAAGGTACTGGAAGGCTTCTGACGTTTGGCTGACGCTCACCCCTCCTGAGCCTCACCTT
TCTGCGCTGCTCCCTGTGTGTAATCACCACATTCTGTCTCTGCTGGCTTCCCTCCACCTCAAAGTCTCAGG
TGACGAGCTCAGCTCTGGCTTCTGTGGCATTTCTGTCTGCTCAGTGAATCTCACTTAAATCTATATACAAAGCC
TTGGTCCCGTGAACAACTCGTGTGCCACCAGCGGCTTGAAGAGGCAAGTCTGGCCAGATGCTGGGCAAGAA
ACCCACGCGCAGATGGGCTGTGTGACCCCAACGTTGCTATGCTGCTGACCGACGATCCCTCGACAGCAAA
TCAGATTACAGAGCTCAGTTCTTTTCACTTGGGCTCTGGATTCTGTGATAGGAAAGGATATACAGAGGGG
AAGAGGCCCTTTTGAATTTTCTTTGAGCAGGTTTACAATTTAGCTTACATTTTTCGACTGTGAACGTGAATAGG
CTGCTTTTGTCTTCTTCTTCTCAGAACCCACAGTAGAGCACTTTCACTTATTGTGGGAGGCTTCAGGGGACT
GTCTCACCTTAACTCAGCCAGAAAGATGCCCTAGTTGTGATCAAGGTAACCTGAGGTGGAGGGTAGCCCTGGG
GCCCTCGACATCACCGTCAATGATGAGGCTGAACCGTGTGCTCCTCGGCAAGATGCTGTGTTGTTACTTCCCT
CCAAGAGGCTGAAAAGGGCTCAGAGCTGCTGAGCAGGAACCGGAGGGTGACCTATTGAGAGGTTGCCGTACC
AGCCTGACTAGGTACAGCAAGCTTGTGTGGGCCCAACAGGCCCTTGGTAGAGCTGTGTCCAGATGTGGGCTCAG

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FIGURE 1390B

ATCCTGGGCATGATGGGCCGAGCCACCTCGGATCCCCTGATTGGCCAGCCGAGCGAGAACCAGGCTGCTGCATG
GCACTGACCGCCGCTTCCAGCTTCCTCTGAGCCGAGGGCCTGCTACGCGGGCAAGCGTGTGCCCTCTCTTCTGT
GTCGTTTGTGGCAAGCGAAGTGAATGAAAAATCCTTAACCGTGGACTCTTCCTTTATCCCTCCTTTACCCACAT
ATGCAATGACTTTTAATTTTCACTTTTGTAGTTTAATCCTTTGTATTACAACATGAAATATAGTTGCATATATGG
ACACCGACTTGGGAGGACAGGTCTGAATGTCCTTTCTCCAGTGTAACATGTTTACTCACAAATAAAATTCCTT
CAGCAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1391

MNGDSRAAVVISPPPTTAPHKERYFDRVDENNPEYLRENNMAPDLRQDFNMMEQKKRVSMILQSPAFCEELESMI
QEQQFKGKNPTGLLALQQIADFMTTNVNVYPAPQGGMAALNMSLGMVTPVNDLRGSDS IAYDKGEKLLRCKLA
AFYRLADLFGWSQLIYNHITTRVNSEQEHFLIVPFGLLYSEVTASSLVKINLQGDIVDRGSTNLGVNQAGFTLHS
AIYAAPDPVKCVVHIHTPAGAAVSAMKCGLLPISPEALSLGEVAYHDYHGILVDEEEKVLIQKNLGPCKSVLILR
NHGLVSVGESVEEAFYYIHNLVVACEIQVRTLASAGGPDNLVLLNPEKYKAKSRSPGSPVGEFTGSPPKWQIGEQ
EFEALMRMLDNLGYRIGYPYRYPALREKSKKYS DVEVPASVTGYSFASDGDGSGTCSPLRHSFQKQKQREKTRWLS
GRGDEASEEGQNGSSPKSKTKVWNITHDHVKPLLQSLSSGVCVPSCITNCLWTKEDGHRITSTSAVPNLFVPLNT
NPKEVQEMRNKIREQNLQDIKTAGPQSQVLCGVVMDRSLVQGELVTASKAIEKEYQPHVIVSTTGPNPFTTLTD
RELEEYRREVERKQKCEENLDEAREQKEKSPDPQAVPHPPPTPIKLEEDLVPEPTTGDDSDAATFKPTLPDL
SPDEPSEALGFPMLEKEEEAHRPPSPTEAPTEASPEPADPAPVAEEAAPS AVEEGAADPGSDGSPGKSPSKK
KKFRTPSFLKSKKKSDS

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FIGURE 1392

GCACGTGTCTTAGGGTAGCGCGCCTGTCTCTCTCGGGTCTCGGGCCCTTGSGGCGCAGCGGGGCGCGCGCAT
GGCGAAGGCGAAGAGGTTCGGGGCGCGAAGGAAGGCTCCGGGGCGCGGGGGAGCGCGAGGGGGCCCGGCGAA
GGCCAACTCCAATCCGTTTCAGGTGAAAGTTAACAGGCGAAGTTCCAGATCCTGGCCGGAAGACGCGCCAGCA
CGTGGGACTGCCCGGGTGTCTCGCGCACGGGCCCTCAGGAAGCGTACACAGACTTTACTAAAGAGATACAAAGAT
AAGGGATAAATCCAATGTATTACAGAGATAAAGCGTTTCGGAGAATAACACAGCAACATGAGCCCGGAGGAAGAT
GATGAAGAGGTTTGGCTCTGGAAACGACGCGACATCATGAGAAAAAAGCATCTACAATCTAAATGAAGATGAAGA
ATTGACTCATTATGGCCAGTCTTTGGCAGACATCGAAGAGCATATGACATTGTGGACAGTGACAGCGATGCTGTA
GGATCGAGGAACGTTGCTGCTGAGCTGACTGCTGCCCACTTTGGAGGAGCGGTGGGCTCTTCACAAAGAGAC
TCAACAGGAAGCGAGGAGCGGGAGAAACCGAAGTCCCGGAAAGAGCTGATTGAAGAGCTCATTGCCAAGTCAAA
ACAAGAGAAGAGGGAGAGACAAGCTCAACGAGAAGATGCCCTCGAGCTCACGGAGAAGCTAGACCAAGACTGSA
AGAAATTCAGACTCTCTCTGCCACAAACTCCCAAGTCAGAGAACAGAGACAAAAGGAAAAACCCAAAGCCGA
TGCATATGACATGATGGTTGCGAGCTTGGCTTTGAAATGAAGGCGCAGCCCTCTAACAGGATGAAGACGGAGGC
AGAATTGGCAAAGGAAGAGCAGGAGCACCTCAGGAAGCTGGAGGCTGAGAGACTTCGAAGAAATGCTTGGAAAGGA
TGAGGATGAAATGTTAAAGAAACCAAAACATATGTCAGCAGATGATCTGAATGATGGCTTCGCTAGATATAAGA
TGACAGGCGTTTGTCTTCTCAAAAGATGGAAGATGAATGTCGAGGAAGATGTCGAGGAAGAGCAAAAGCAAGGA
AGCCAGTGACCCGTGAGAGCAACGAGGAAGAGGTGACAGTTTCAGGCGGGAGGACACAGAGGAGCGACAGCC
AGATAGGCCACTTGGACCTGGAATCCAACGTGGAGAGTGAGGAAGAAAAACGAGAAGCCAGCAGCAAAAGACAGAGGCA
GACTCCTGGGAAAGGGTTGATAAGCGGCAGGAAGAGCTGGAAGAGCTACCGAGAGAGCTGCCCTACACGTT
CGCAGCCCTGAATCCTATGAGGACCTGAGATCTCTGTGTTAGGAAGTCGATGGAAGAGCAGCTTTTGGTGGT
GGAGAGAATTCAGAAGTGCAACCCAGCTCTCGCAGAAGGAACAAAGCAAAATTAGAAAAACTGTTTGGCTT
TCTTTTGGAAATCGTTGGCGATTGGCTACAGATGACCCACAGACTTCACAGTCAATGATGATTGGTTGTGCA
CTTATATCATCTTTGCCACAGTGTTCCTGAATCTGCAAGTAGCAGCTATCAAATTTGTTCTCCGAGATGCGATGCA
TGAGATGGAAGAAATGATTGAGACCAAGGCCGGCGGCATTGCCAGGGTTGGATGTGCTCATTATTTGAAAT
CACTGGGCTGCTATTTCCAATTCGACTCTTGSCACCCAGTGGTGACCCCTGCCCTCGTGTGCTCGCTCAGTCAGCT
GCTCACCAAGTGCCCCATCCTGTCCCTCCAGGACGTGGTGAAGGGCCTGTTCTGTGTGCTGCTGCTTCTCGTAGTA
TGTGGCTTTGTCACAGAGGTTTATACCTGAGCTTATTAATTTTCTTCTTGGGATCTTTACATAGCAACTCCAAA
CAAAGCAAGCCAAAGGTTCCACTCTGGTGACCCCTTCAGAGCGCTTGGGAAGAACTCGGAAGTGCCTGTGTGTGCT
TGCTATGAGAGGATGTGGCCACGTGGCAGCAGAGCAGCTCTCCTCCGCTGGGCGAGTAGACTGAGGGCCCAAC
TTCGACAGAGGCCAATCAACTCCGACTGTCTGCTGCTGTGGGCTGCCCTGCTCGTGTGCTGCTGCTCAT
GTACGGGTCCTGCCATCCTTCCAGCCATCATGGGCTCTCCAAGCCCTCTCACGGATCACTCGGCGGACTG
CAGCCACCCGCGAGGAGCTCCAGGAGCTGTGTGAGAGCACACTGACCGAAATGGAAGGCGAGTGTGCGG
GCCGCTGACCTGTGAGAAGCAAGCTGTCCACTGAAAGCTTTTACACCCCGGCTGGTCAAAGTCTCTGAGTT
TGAAGAAAAACAGGCGAGTAGTAAGGAGGAACAGGAAGGAAGAGGCTGATCCACAAACACAAGCGTGAATTTAA
AGGGCGCGTTTCGAGAAATCCGCAAGGACAATCAGTTCTCTGGCGAGGATGCAACTCTCAGAAATCATGGAACGGGA
TGGCGAAAGAAAGCGGAAGTAAAGCAGCTTTTAAACAGCTGGCTACACAGGAAGGCGAATGGAAGGCTCTGAA
GAGGAAAAAGTTCAAAAAATTAATTTATATTAATAAGGCAAGGAATGACATTAACCTACATCTGCAAT
CCAACTCTGGGAGGCCAAGGCGAGGAAGATTGCTTCAGCCAGGATTCGAGACCGCTGGGCAACACAGGA
GACCCGCTCTACCAAAAAAAGTATAAAATAGCCAAGTGTGGTGGCAGCAGCTGTAGTCCCACTACTCGGG
AGGCTGAAGCAGGAGGACTGTGAGCTGAGTCAAGGTTACAGTGAAGGCTGATGAGCCACTCAGCTCAGG
GATTACAGACATGTGCGACCAAGCCAGGTAATTTGATTTTGTAGTAGAGGGGTTTCTCCATGTTGGTCAG
GCTGGTCTCGAATTCGACCTCAGGATATCCACCTGCCCTTGGCCCCCAATATATAGGTTGAGCCACAGCACC
AGCCAAAAAAGTAATTTTTTGTAGTAATAATGCTATAATGTTGGTGTGATTCCAACCTCAGCTCCCCCAGC
CGCTGCTCGGGTTTTGTTTTGTGTTAAACGTCACCTGATGAATAGAAATGAATCCTGAAATGACCTCTGGGAT
CGGGAATGGTCTGTGTGTTATCAGCTGCGACTGGTTCTAGCGTCTGGACAGCCCTCATGGGAGCTGGGATCT
GGCCAGTGTAAATTTCTGTCACACCAAGCGAGTGTGCCCTCATGTGATGAATTAAGTGTGTTATGCAATTAAT
TTCAATATAAATG

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FIGURE 1393

MAKAKKVGARRKASGAPAGARGGPAKANSNPFVKNRQKFQILGRKTRHDVGLPGVSRARALRKRTQTLLKEYK
ERDKSNVFRDKRFGEYNSNMSPEEKMMKRFALQQRHHEKKSIIYNLNEDEELTHYGQSLADIEKHNDIVDSDDA
EDRGTLSAELTAAHFGGGGGLLHKKTQEGEEREKPKSRKELIEELIAKSKQEKREQAQREDALELTEKLDQDW
KEIQTLSSHKTPESENROKKEKPKPDAYDMVMVRELGFEMKAQPSNRMKTEAELAKEEQEHRLKLEAERLRRLMLGK
DEDENVKPKKMSADDLNDGFVLDKDDRRLLSYKDGKMNVEEDVQEEQSKEASDPESNEEEGDSGGEDTEESDS
PDSHLDLESNVESEENKPAKEQRQTPGKGLISGERAGKATRDELPHYTFAAPESYEELRSLLLGRSMEEQLLV
VERIQKCNHPSLAEGNAKLEKLFGLFLEYVGDLATDDPPDLTVIDKLVVHLYHLQCMFPESASDAIKFVLRDAM
HEMEEMIETKGRALPGLDVLIIYLKITGLLFFTSDFWHPVVTALVCLSQLTKCPILSLQDVVKGFLVCCFLFE
YVALSQRFIPELINFLGLIYIATPNKASQGSTLVHPFRALGKNSSELLVVSAREDVATWQQSSLSLRWASRLRAP
TSTEANHIRLSCLAVGLALLKRCVLMYGSLSFHAIMGPLQALLTDHLADCSHPQELQELCQSTLTAMESQKQLC
RPLTCEKSPVPLKLFPTPLVKVLEFGRKQGSKEEQERKRLIHKHREFKGAVREIRKDNQFLARMQLSEIMER
DAERKRKVKQLFNSLATQEGEWKALKRKKFKK

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CCTCCCGGCTTCGGCGAAGCAGGGGAAGGGGAGAGAAGCAGGAGTCGGGAGACTGCACAGGCCAGAAAGTCTCGCGA
CGGGCCGCGCCCTCGGCCCGCCCGGGCTCCAAGTCCCGCTCGCCCGCTGGCGGGGACGGTGCAGCAGCGCGC
GGGATCGCGCGGGGCGGAGCTGTAGCGCCCGCGATGCGCGCGCGCGGGCGGCTCGAAGAGCGCAGCGCGGCT
GCTCGTCGGGCGGGAACGCTGCGCGCGCGCCCGCCCTGTCGCCCCCGCGTCTGCTGGGCGCGCGCTCGG
CTCTGGCCTCGGCGCTTTGGCTTGGCTTGGCTGCGCGCGGGCGCGACGCGACGGAACGAAAGACATCTCAAA
TCTGCTCAAGAATTGGAGTCTAATGCGCAGACCCCCTCGAAACTGGCTCCCCATCAAGGAGGAGGAAGAGAGA
AGTGCAGATGTCGAAGGACAGGAAGACTGTTGATGAATGTAGCGCCCTCTCAACAGCAATATCAACAGCATTCGCG
CTCGAAGGCCAAAGTCATCTACCCCAATCAATCAGAAGTTCGGGCTCTGGCGATGGCTCTTCCAAACCCGCTCTCT
GCATGAAAACTTAAAGCAGGCTGTTTGGCCACACCGCGGTAGAGCCCTCTCTTCCAGCAGTCTGGGGAGAG
GAGCCAGGGGTGAAGAGACGCTGCAGTCTCTCATCTCCAGCCGCTTCACTCGGCCACACCGAGTACAGGTTTCTCAG
CGCACTCTCTCCGGGTGAACGCTCTCTCTGAAGTCTGGCTCTGCAGAGTGTAGACGTTGACCTGTGTACTCTA
CAGCCTTCACTTAAAGACCTGCTGCAATTTGGACAGGCACTGAGGACGAAAGCAATATGATGTTATTCAGAT
TTTAAATGTGCCCTCTGACCTTTCTCTTAAAGAAAGTCAGATGTAAGTAATACCGAAGATCTCTTCAAA
ACGAAAAAAGATTGGAGGAACTAGAAAAAGGCACTTCAGGTCAAACGTCTCAAACACAGAAATGTCGGGGGCTGG
TGACTCTTGATCACTCACCTTGGCTGATGTGGGAAAGAGGAGAGCAATATCTGAACAGCTAATTCGATAATAT
GGAAGCTTCTCGAAGACAGATGCAAAATACCGACGTTCTTGTGGAGCAGTTTAAGTGTTCAGCTTCAAAGC
CCGACAGCTGATGATGACTCTGACGGAAAGAAATGATTGCGACCGGAAGGCTATTGTGGATTTCTCAGGAGCTGCA
CGCTCTGGACGCCCTGGAGAGGACGATGGGCGGGCGCATCGTGCAAAAGTATTGGATTTCTGAAGTCTCGAAGT
CCAGGAGGAGACAGGTGCGCGCTGGCTGCATCTCCACGCGCTGAGAGCTCGTGCTGGTGGAGGGAAGCTGTCT
CGGGCGGCGAGGAGGAGCTGCTCACGCGACGACACAGGCCTTTGGCAGGAGGACGAGCGGCTTACGCGGGGA
GTTTGTCCAGGAGGCAAGAACTGTGTCAGCGCTCTTGTGGTACCAAGTGGAGGAGACCGCAAACTCACGCT
GGCCCAAGAGGAGGAACAGAGAAGCTTCTGGCTGAGGCCACCGCACTGTGACCCGAAAAAGTTTCTCGAGGC
TTTTCATGAGGCTCTGGAGAGGACGAGGCTGATGCACTGTACCTGGAGAGGAGGAGAATCTGCAGGCCACCGGA
GGCTGTGGTGCACCTGCAGAGGACTGTACTTCAGCACCTGGACATTTCCAGAAATCTGTGAGAGTCCGCTGT
CTTTCAGGCTCCGCTTGGCATGACTGGCTCCCCCGGAAGAGTGTGACTACTTGAGGACGAGAACTCGCAGGAGA
CGCTGCTCGGCGCTGGGGAAGTCAAACTCGTCTCCGGAGCGCAGCTGGAACACTTCCAGGAGTCTCTAGACA
AACCGACAGGTTGGTGTGGAGAGTGTGCGCTTCTCAGCGCTGTCGACACACACTCTCGGGAGGAGACGAGGG
CACCATCCGGGCGCTTGTGGGCGACCTGGGCGGCTCACTGAAGATCCACCGGCTGTCTGTGCAAGGGCATGA
CTGCTGTGTGCGTCAAGCTCTCGAGAGCTGBCATCTCCGCGGCAACGCGCTGGCCGCTGACGACATCTGCGCT
ATCGGGGAAGAAGCACTCTCTGCAGGAGCTGCGGGAAACAGCGTGCACTGGAGCAGGGGTCTCCAGTGCCTGGA
CGAGCATCAGTGGAGCTGCTCAGGGCCCTGAGAGCGCGTGTGAGAGGAGGCCAGCGGCTAGAGAGGAGAC
ACAGCAGACAGCGCTGCAGCTCCAGCAGCGGCTCTGCGCCGAGGCCAGGAGGTGGGAGCTCTGCAGCAGCA
GATGAGTTCGCCATTTGGCAGGCGCTGCTGGTGCATGCGAGGAATGACGCCACCAAGAGCGGGGCAAGGACAGA
CGTGACTTCAAGAGGACACTGAGTGGAGCGGCAGTGGAGGCGTCACTAGTGAACAGCGCTGGTGTACGCGCT
GGTGCAGGCGCTATTACAGCAAACTCGGAAGGATCATGAGGAGCAGGAGGAGAGAAATGCAGACCTGAAGAC
CCTGCAAGGTTGAGAGATGAGAAATTCAAACTCGGAAAAAGCAAGAATCAAGCAACCTTGTCTGGGACGAG
GAGCGGAGGCTGGCGCTATGGAATCTCCAGCGGCGTCCACAGAGAGA TGCTGTCCACGACAGAGAGTTCCTGG
CCAGTTCAGTGCACCAGCAGATGCGTCTGCAGCCACGACGACAGGCGAGGAGTCATGACCTTCTGGAAGC
CAGCTTGGAGCAGCAGCTGCTCAGGAGAGCTGACACAGAACTTCACTTCGAGCTGGCAGCTTGGCCGAGTGCCTT
TGCTGAAGGCAAACTGTGCTCGTCTGAAGCTGGGCTGCTAGAGAAGCCCTAAAGCATAAAGGAAAGAGCCCTCT
GCCCCAGGAAAGAGGGGACCTGGGGGTCGCCAAATGAGGACCTTGTCTCGGGGACAGCAGCTCAGGCTCAGT
CAGCAGCAAAAGGCTGAGTGCAGCAAGAAATGAAGCTGGGACGCTGGGAATCAAGAAGATGCTAAGAGCAAG
AAGCAAACTGTAGTTTAAAGACCACTCGTGGGACAGACCTTGAAGCCTGGGCTGGGTTGAATTCACCTTCT
CTCTCGAAGTCTGAGAGCGCAGGAGCGGAGGAGGACGAGCAGCGCACTCTTGAGCTCTTCTGAGGGGACAGAGA
AGAATAGAAATGTGCCCCATAAAGCAATAATGAGTATCACTTGAGAAATTAGGCAATCCCGCTTGTGAAACAGCT
CTCTGTGAGTTTGCACTTTCATTGGCTTGGAGCCTGGCTCGATGCTCATGGATCTTCTCCCCAAGGAGGGAC
GTCTTGAGGGGCTCGAGCTCAGGCCAGGACCCCTGATCGACAGTCTGGAATCCCTGGCCCAAGAGGCTGTCTG
GGCCCATCTGGGCTGAGACACAGATACATAATGACACTGTCGAAAGATGTAATCTTGAGACACTAGAAAT

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FIGURE 1394B

ATGAGGAAGAGGGGTGTGGCCCAACCCCTCACTTCACCTGGGGAGGGGCTTCTTCGGGACAGTAGACACCTTGCCCG
TGCAGAGAGATGTCATGGGGGACCTGCTCTCCCTGATAGATGCTGAGAGCATCCAGAAACTTCCAGACCAGCCCG
TCTCACCAACCTCCAGAAAGGCCCTTTCCCATCTGGAGAGAAGCTTCCAGACAGCCCTTACACACCCACAGCCGAG
GAGGGGCCCTTTCCACCTGGAGAGAACTTCCAGACCAGCCCTCATACACAGCCAGAGGGGGCTTTCTCACC
TGGAGAGAAATTTCCAGACCATCCCCCTCTCACCACAGCCAGGAGAGGCCCTTTCCACCGGTAGAGAACTTCCAG
ACCGAGCTTCCACCCACAGCCAGAGAGAAGCCTTTCCAGCTGGAGAGAACTTCCAGACCAGCCCTCTCACTAC
AGCCAGGAGAGGCCCTTTCCGCCCTGGAAACTTCCGGACAAGCCTCTCACACACCAGCCAGGAGAGGCCCTTTCC
CACCTGGACAGAACTTCCAGACCGCCCTCTCACCACAGCCAGGAGAGGCCCTTTACCACTGGAGAGAAGCTT
CCAGACCAGCCCTCACACCACAGCCAGGAGAGGCCCTTTCCCACTGGAGAGAACTTCCAGACCAGCCCTCAT
ACCACAGCCAGAGAGGGGCCCTTTCTCACCCTGGAGAGAACTTCCAGACCAGCCCTTCAACACCCGCCAGGAGAG
CCTTTCCACCCGGGAGAGAACTTCCAGACCAGCCCTCACACCACAGCCAGGAGAGGCCCTTTCCACCCGGGAGA
GAACTTCCAGACCAGCCCTCTCACTACAGCAGAAGAGGCCCTTTCCACCCGGGAGAGAACTTCCAGACCAGCC
CCTCACACCACAGCCAGGAGAGGCCCTTTCCGCCCTGGAGAGAAGCTTCAGGCCAGCTCTCCACACCACAGCCAGG
AGAGACCTTTTCTGCTGGAGAGAACTTTCAGACCAGCCCTCACACCACAGCCAGGAGAGGCCCTTCTCGCT
GGAGAGAACTTCCAGACCAGCCCTTCCACCCACAGCCAGGAGAGGCCCTTTCCCACTGGAGAGAACTTCCAG
CCAGCCCTCTCACACAGCCAGGAGAGGCCCTTCCCACTGGAGGAGAACTTGCCTTTGATGGAGGTTAGG
ACTGTCACTTCACTGTGAACATACCGGGCGAGATCATTTCTCAGGGGAAGAGCTGCCAGAGATACAG
GATGTTCCAGTGTCCTGGTCTCTGCCACAGATGCCAGACTCCCACTTCTGGGCAAGCTTCCAGGATGTCTCC
AGACACTGCCCGGTGTCATGGGGTATCACCCTGTGCTGAGTCAAAGGGTGCTTGCCTGTCTAATCCAG
GACATAGCCGTGGATAGCTCAAAAACTCCCAAGAACTAGTGAGCCCTTGGCTCTGGGAGCCCTATCTCAGGA
ATTTTCCGGTCAATTTGGTCTTTTCAATTTCTTAAACCTGAAATAGACTCTCTTGAACCAAGTGACTCTTCC
CAGTGGCCAAACTTAATCATCAGAGCGCTTCTTCACTTCTCAACCATCAGCCAGTGGGCTCTCCAAAGTTAA
CCAAACAGCTCCCTCTTGTGGTTCATAAAAACTTGGTTATTTCCATGGATGTGCAAGCTATGGCTTCTCTGG
TGCAATATTTCTAAACCTGCTTTGCATAGAACTCACTTTTGCCAGGCTGGAGTGCAGTGGCGTGATCTCGGCT
CATGGCAATCTCCATCTCCGGGTTCAAAGCAATTTTCTGCTCAGCCTCCCACTAGCTGGGACTACAGACGTG
TGCCACAGCCCTGGCTGAATCTTTTTTGTATTTTATTTTAGTAGAGACGGGGTTCCACATCTGGCCAGGCTG
CTCTCGAACTCCTGACCTCATCTGCCACTGCTTGGCCCTCGCCAAAGTGCTGAGATTAGCCGTAGCCACCGG
CCCGGCCAGAACTGACTTTATATTTGTCACATGGGCCCTCTGCACAGAGTCCGATGGCTCTCCGGGGAGCCCT
GATTTTGTGACGTGTATAGTAATGCAAGCCCTCTGGCAGCACCAATAATTTGGTCGGTTACCCCTGAGCCAGAG
CTCTGAAAGCATCTGTGGAATGATCAGCGGACCTTCTCCTCTGAGAAGGCTCCGGCTGCTCCCGCCACCGA
GCTTGTAGCTGTAATGCTGCTGCTGCTGAGTATTTGCTTCTGGGGTGCTTCTTAGCCAAAGGGAAGCTG
GTCAATTTGCTGACCCCTGGCCACCCCTTGGCCGCCAGCTGTGTGCTGGGCACAGTCTGGGGCACAGGCCCTCAT
GATGAGAGCCGCTGGGCTGTGGGTGCTTATCCCTGACAACTGGCACCTGTACCTGCCAGGAGCATGATG
GGGACTTCCATGCTGGAATTTGCTCCTGATTAATAGATATGGCTATTGGAAGACTGCAATTTTAGCCAGT
GTACCTGGGCACAGACTCGGGGCTGCCTGAAGCTGATGAAGGCTTGAAGGACGGAAGGCGCTGAGCCATGAAG
GCAGCACTCAGGGCCAGGGGAGAGAGAAGAGGATCAGCACTGCAGCCAGGATCGTGCAGACGTGCTTCTG
CCAATGATTGTGAAGTTCTAGCAGCTGGGAATCTCTCGGAAGAACTGGTTGTTAAAGAGCACTCTGCTCTCTC
CTCTCTGTCATGTGATCTCTGACACGCTAGCTCTCCTTGCCTTCTGCACTGTGGAAGTACCTTGAACCTT
CACCAGAAACGACAGCGCTGGCAGCTGCTGCTTGTACAGCCTGCAGAGCCGTGAGCCAGTAAACCTTTTAATTA
CCCAGCCTCAGGTGCTCGGGAAACGCTTCCGGGAAATGAAGCGGCCCATGCTTGTGACCTGTGATGTTCCG
TCTTCAAAGACATCTTGCCTGGCTGATGACCACTAGTGGGGAGCCGTGGCACTCCACTCCCAAGATGTTG
TACTCCACCGCTGTGACCAACAGCCCTCAGCGTTACTTCCAGGATTTGCTCTGCCCAAACAGAGCTGTTCAATAC
AGCGATTTTGCCTAACATTAATATAAGCGTGTTCCAAATGTTTTTTTCTCTCTAAAAATACCTTTTATAGAC
TGTAATATTTCCACTGTATGGTCCACGTGTATATAACCAACACTCACCCTGGCGATGTAGGCTCGGGTGCGT
TCTTATAATCAAATCAATATTGTTCTGGGGCATCAAAAGAGGAAGGGGGTCCCCXGGGGGTATGCAATGTGGC
TGCTTTGACTGTACTGGACATAAAAAATAAGTAAATGTTCTCATTTTACTTAAATGTGCTTTAAATAAAAT
TTTTTCTCTAGGTT

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FIGURE 1395

MARGGAACKSDARLLGRDALRPAPALLAPAVLLGAALGLGLWLGCRAGRQRTRHQKDDTQNLKKNLESNAQT
PSETGSPSRRRKREVMQSKDKEAVDECEPPSNSNITAFALKAKVIYPINQKFRPLADGSSNPSLHENLKQAVLPH
QPVEASPSSSLGSLSQGEKDDCSSSSSVHSATSDDRFLSRTFLRVNAFFPEVLACESVDVDLCIYSLHLKDLLHLD
TALRQEKHMMFIQIFKMCLLDLLPKKSDDELYQKILSKQEKDLEELKGLQVKLSNTIEMSGAGDSEYITLADVE
KKEREYSEQLIDNMEAFWKQMANIQHFLVDQFKCSSSKARQLMMILTERMIAAEGLLCDSQELQALDAERTMGR
AHMAKVIIEFLKLQVQEETRCRLAAISHGLELLAGEGKLSGRQKEELLTQOHKAFWQEAERFSREFVQRGKDLVTA
SLAHQVEGTAKLTLAQEEEQRSFLAEAQPTADPEKFLEAFHEVLERQRLMQCDLEEEENVRATEAVVALCQELV
STVDTFQKFVDALFLQTLPGMTGLPPEECDYLQREVQENAAWQLGKSNRFRQOWKLFQELLEQDQQVWMEECAL
SSVLQTHLREDHEGTIRGVLGRLGGLTEESTRCVLQGHDLLLRSALRRLALRGNALATLTQMRLSGKKHLLQELR
EQRALQEGSSQCLDEHQWQLRLALEARVLEEASRLIEEAQQTRLQLQORLLAEAEVQQLLQOHMECAIGQALLV
HARNAAKSRAKDRDDFKRTLMEAAVE SVYVTSAGVSRVLQAYYQOIGRIMEDHEERKLQHLKTLQGERMENYKL
RKKQELSNPSSGSRTAGGAHETSQAVHQRMLSQQKRF LAQFPVHQOMRLHAQQQAGVMDLLEAQLETQLQEAQE
NFI SELAALARVPLAESKLLPAKRGLEKPLATKRKKPLPQERGD LGVPNNEDLASGDTSGSLSSKRLSQQESE
AGDSGNSKKMLKRRSNL

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FIGURE 1396

CCGATCCGGGGCGGTGCTGGCAGCCGGAGCGGGCGGGCGGGCCGAGCAGCCGGGGCAGCCGCGCTGGGCATCC
ACGGGCGCCGAGCCTCCGTCCGTGCTCTATCCCTCCCGGGCCTTTGTCAGCGCCGCCGCTGGGAGCGGGCCGA
GAGCGCCGGTCCAGTCAGACAGCCCGCAGGTGAGCGCCGGGGCGAGGGCGCCAGAGGGGGCCATGTCGTACC
AGGGCAAGAAGAGCATCCGCCACATCAGAGTGACCGACTCCTCATCAAAGGTGGACGGATCATCAACGATGACC
AATCCCTTTATGCTGACGTCTACCTGGAGGATGGACTTATCAACAATAGGAGAGAATTAATCGTTCTCGTGGT
GAGTGAAGACCAATTGAAGCCAACGGGCGGATGTTATCCCGGAGGATTGATGTCAACACGTACCTGCAGAAAGC
CCTCCAGGGGATGACTGCGGCTGATGACTTCTTCCAAAGGACCGAGGGCGGCACTGGTGGGCGGGACCGATGA
TCATTGACCATGTTGTTCTGAACCTGGGTCCAGCCTACTGACCTCTTTCGAGAAGTGGCACGAAGCAGCTGACA
CCAAATCTCGTCTGTGATTACTCCCTCCACGTGGACATCAACAGCTGGTACGATGGCGTTGGGAGGAGCTGGAG
TGCTGGTGCAGGACAAAGGCGTCAATTCCTTCAAAGTCTACATGGCCTATAAGGATGTCTACCAAAATGTCCGACA
GCCAGCTCTATGAAGCCTTTACCTTCCCTTAAGGGCCTGGGAGCTGTGATCTTTGGTCCATGCAGAAAAATGGAGATT
TGATAGCTCAGGAACAAAAGCGGATCCTGGAGATGGGCATCAGCGGTCCCGAGGGGCCATGCCCTGAGCAGACCTG
AAGAGCTGGAGGCCGAGGCGGTGTTCCGGGCCATCACCATTGCGGGCGGATCAACTGCCCTGTGTACATACCA
AGGTCATGAGCAAGAGTGACGCCGACATCATCGCTCTGGCCAGGAAGAAAGGGCCCTAGTTTTTGGAGAGCCCA
TTGCCGCGCAGCTGGGGACCGATGGCACCCATTACTGGAGCAAGAAGTGGGCCAAGGCTGCGGCGTCTCGTGACT
CCCTCCCTTGAGCCCGGACCTTACCAGCCCGACTACTGACCTCCCTACTGGCTGTGGGGACTTGCAGGTCA
CAGGCACGCGCCACTGCTCCCTACGCACTGCCAGAGGCGGTGGGCAAGGACAACTTTACCTGATCCCCGAGG
GTGTCAACGGGATAGAGGAGCGGATGACGGTCTGCTGGGACAAGGCGGTGGCTACTGGCAAAATGGATGAGAACC
AGTTTGTGCTGTCAACGACCAATGCAGCCAAGATCTTTAACTGTACCAAGGAAGGGCGGATGCGCTGG
GCTCGGATGCCGACGTGGTCTATGCGGACCCCGACAAGTTGAAGACCATAACAGCCAAAGTCACAAGTCGGCGG
TGGAGTACAACACTTTCGAGGGTATGGAGTGCCACGGCTCCCAACATCACCAGCTCGGTGACAGTGGATGCGCGGAG
TTGAAGACGGAACATCAACGTCAACAAGGCGATGGGCGCTTCACTCCGCGGAAGGCGTTCCTCGGAGCACCTGT
ACCAGCCGCTCAAAATCAGGAATAAGGTTTTTGGATTGCAAGGGGTTTCAGGGGCGATGTATGACGCTCTGTGT
ACGAGGTACAGCTACACCCAAATGCAACTCCCGCTCCTTCAGCCAAATCTTCGCTTCTAAACACCGAGCCCC
CACCATCAGAACTCCACAGTCCAACCTTCACTTATCAGGTGCCAGATAGATGACAAATCCCAGGCGCA
CCGGCCACCGCATCGTGGGCGCCCTTGGTGGCCGCTCCAACATCACCAGCTCGGTGACAGTGGATGCGCGGAG
GAGCTAGGCTGAAGGATTCTGGGAATCATGTCCATCCCTTTTCTGTGAGTGTTTTGAACCCACAGTTTATG
TGTGCTGATGGAGGGAGGGGGAAGTCGAAGGATGCTCTTCCCTTTTCTGTTTAGGAAGAAGTGTGACTAGTGT
GGTGTGTTGCTTGGAAATTCCTTGCCCCACAGTTGTGTTCTGATGCTGATGCTGATGCTGATGCTGATGCTG
TCCCCCTTCTAGTGAACCAAGGTTTTAGCATGTGCTGTTCTGCTGCTTCCACTTCTAACTCCATGGCTCCA
TGATTCTCTGAGTGGTGTCTTCTTGACCCGTGATGATGTTCTAGGATAGTTCATGATGTTTACTAAATACGTA
TGCAAGTCTGTGAGTGGCTGAGGGGACATCGCCAAAGGACTGACTGAGACAGGATGCCGAGACCTCAAGCCCTG
AGGGGAGTCCCAAAACCTCTACAGTGAAGATGTTTACTCATTGCCCCACCTCTGGTCCACTAGAAAGAAC
TCGCCCCACCTCCACTGTGAGATCCGTGAATTCGGAATGCGAGGGGAAGCTTGCACTAGGTTGTCAGAGAAG
CATCTCCACATCTCTGTGAGAAACCTGGTCTCCGTGGCACTGTAACTCACCGTCTGCTCTCTGTGCTGTG
TGTGTTCTTCAAGCCAGCTCTAGGCTTCAGGCGGAGCGGTTCACTGCGGTGAGTCTGCTGCTCTGAGGAGTGCAGGGG
CGGGGCTGACGATGGGGGCTGATGGGCTGCCCTGCGTGGCTGAGTCTGCTGCTCTGAGGAGTGCAGGGG
CAGTCAGATTTTTAAAGTTTTGTACAAAGTTTTCTTGTGAATCACTCCCATTTTACTTAAACCAACTTGT
GTGGCTCTTATTTCTGAATCAAAGCTTGTGAAAAATAAAGAAAAATGAACGCCCATGAAAAAATAAAAAA
AAA

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FIGURE 1397

MSYQGKKSIPHITSDRLLIKGGRIINDDQSLYADVYLEDLIKQIGENLIVPGGVKTIANGRMVIPGGIDVNTY
LQKPSQGMTAADDFQGTAAALVGGTTMIIDHVPEPGSSLLTSFEKWHEAADTKSCCDYSLHVDITSWYDGVRE
ELEVLVQDKGVNSFQVYMAKDVYQMSDSQLYEFTFLKGLGAVILVHAENGDLIAQEQRILEMGITGPEGHAL
SRPEELEAEAVFRAITIAGRINCPVYITKVMKSAADIIALARKKGPLVFGEP IAAASLGTDTGTHYWSKNWAKAAA
FVTSPPLSPDPTTPDYLTSLACGDLQVTGSGHCPYSTAQKAVGKDNFTLIPEGVNGIEERMTVVWDKAVATGKM
DENQFVAVTSTNAAKIFNLVPRKGRIAVGSDADVVIWDPDLKTTITAKSHKSAVEYNIFEGMECHGSPLVVISQG
KIVFEDGNINVNKGMGRFIPRKAFPEHLYQRVKIRNKVFLQGVS RGMVDGPVYEV PATPKYATPAPS AKSSPSK
HQPPPIRN LHQSNFSLSGAQIDDNNPRRTGHRIVAPPGGRSNITSLG

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FIGURE 1398A

TTTCTCCTTGGACCAAGATGACTGATGAAAACTCTCCACCTCTACAAATGGCGTAGCCTTCATGGGTATTCTGG
ATGGTCGACAGGAAACCCCTCTCAGAACCTGCAACACGCTCAATCTCAAGGCGCCCCAGCTCTCTCCGCGCCCTG
AGTACGGGCCCAAGCTGAAACTCGCCAGGCTTTAGAAGACCGGCACAGCCTCAGTCCGCTGGACTTCGGGATTCTTA
CCCTGGAGATCGGGAACCCGGAGCCTGTACCTGCGAGCGGTCCACGTGAGAGGAAGCAGTCCGACTCCGAGCC
TCAATCCCCGAGCGGGCTCTCAGAGCGCTGCGCGCTGCCATCCTGTGCGCCACAGCTCCTAGCAGCACCAGC
GGGAACAGAGGTCGCAAACTCTCCACGTTTCCACAGGACAGGTATGACTCGGTGAAAGCTCCAGCTCCGAG
CCAAAGCCCTGACCCGAGCGATGATGTCCTCGCTGCGAGCGTGTCCAGTCTTTGGGACAGAGCTGTCCACCAGC
TGTCCTGCGCAATGAGGACATCTTGGACCTTGTGGTCACGAGCAGCTCCAGTCCCATTTGTGACCTGGAGAAATG
ACGATGACCCACAGTTTTACCAACGTACCTTGAGCTCTATCAAGGAAACCCGTGGCTTACACCAGCAGGACTGTG
TTCATGAAGCTGAGGAGGGGAGTAAATTGAAATATTGGGCCCATTTAGTAACCTCTTTCGAAGGAACCTTGTCTG
CTAGAAAACAAAGTGCAAGGCTTGACAAACAAATGACTTGGGATGGAAGTTATTTGGGAAGCGCCCATCCGAG
AGAATGCCAGAGGATTCAGAAGAAATACAGAAGGAATATGAAGACAAGCTGGAAGACCTAGCAGGCCACCT
CTCCAAAGCAGAAATGTGAGGAAGAAATCTTGACTTTGAACCACTTTCCACCACCGCACTATCTCTCGAGGACAGC
CAGCAAACTCTCCAGCAAAAACCAAGCTGAAGAAGCTCAGAAGCAGACAGCAGTATGAAGAAATGGTGTTCAGG
CCAAAAGCGAGAGCTGAAAGAAGCCAGCGAAGGAAGAAGCAGCTGGAAGAAGATGCAGAGTCCAGGAAAGCA
TTGGAAACGCTGTCTCACTCTGGAATTAATGAGATCTTACCTAATGGGAACAACTGTGGCTCTAGAAAGCTTTC
GAGATTTATGGTGGCAGGGAATCCCTCCAAGTGTGAGAGGCAAACTCTGAGCTTAGCCATTGGCAACAGAGTTAA
ATATCACCCAGAGCTCTTTGACATCTGTCTTGCCGAGGCCAAGGAGAGGTGGCGGTCCCTTAGCACAGGAGCT
CTGAAGTGGGAACAGAGATGCTGGTTTTTTCAGCAGCAGACAGAGAAGCCAGCTGGAGCTTATTAACCTGGACA
TTCTAGAACATTTCTCAATCTCTGCATTTCCAGCAAGGTGGTCCATATCATGACATGTTGACAGATATTTTGG
CGCTTATACTTGTGACGGGCGAGATGGGGTTATGTCAGGCGATGTCCTTACATACAGAGAGTGTGATCTTGA
ACTTAGATATGCGAGATGCCTTTATTTGCCCTTTTCAACCTCTGAAATAAACCTGTCAAATGGCGTTTTTATAGAG
TGGACATGGGCTTATGTTGACTTATTTTGTGCAATTGAAGATTCTTTGAAGAAAATTTGGCGAAATTAATTG
CGCATTTCAAGAAGAACCACTAATCCTAGATATCTACCTAATTGATGGATCTTACCTTATATAGTAATCTC
TGCCCCCTGCAGCTGGCCTGTGATCTGGGACGTGTTCTGTGCGGATGGGAAGAGTTCCTGTTCCGCAAGGCGC
TGGGCATCTGAAGCTGTTTCGAGGACATCTTGACCAAGATGGAATCACTACAGGCCAGTCTGCTGACCCGCG
TGCCCGAGGACCTTGCCCGCGGAGAGCTGTTTGCTCCATCGCCACGATCCAGATGCGAGCGCGAAACAGAAGT
GGGCTCAGGTACTGACTGCATTGCAGAAAGACAGCGGGAAATGGAGAAGGGAAGTCCGCTCCCTCCGACACTGAG
GCTGCGCGGGGAATTCGACTCTGGCACCAATCAGAGCCCATGCGCGGCCCTCTGTGTTTTCAGACTGACACC
CGGGCAGCGGAGAAGAACAGACGCTCTTTAAGTTTGATTCCTAACACTGGAAGTTGGCCTTAAACAAAACAAACAC
AAAACTTTTAAAGAATTAACCAAGGCTTAGCCTTAAGCAGCTCAGTGAAGGATGAGCTGTGCGGACACAG
CCAGCACTGCTGCTGCTGCGACAGTGAACGATGGCGAGTGCATCCACCCCATCCTTTATTTTCAGAAAAGCTA
ATTAAATGTAATGTTTCTATGTCAACTACTGGGAAGTATGTTACAGTCTTAGCCAGGATGCATGAGAGATGTTA
TTTGGGAGACTTGAGATGCTTTGGCTGATATTTACATGTTTTCGATAAGAAAGGATCGCTGATGAGATTGTA
GATAGTTTTTCCAGAGCTCGAGGTACAGTTTCAAACTCACTACGAAGATAGCATTAAGGAACAGGSGCTC
TCTGAGGATGGCCACTGATGTGTGTTTGTGGATACCTGGGCATCGACCAGCCTGCGAGTGAAGCTGCGGCCATG
TTGCTGTGACACAGTGCAGTGTAGAGGCTGCAAGTGCACAGTGGGCTCCAGTGGAGCTGGGCTCTGGGAGACT
GCTCCTGCGCTACGCTCTCGGAGGTGGAAAGTTCGAGAGGAGGAGCTATTGCGAGGAAGCCCTGTGGCAATA
GAGATAGGCTTAAAGCGGAGAGAACACAGAGTGGGAATCAGCCCCCTGTAAATGAAGGATAGAGAAGAGATGT
GTGGCTGGGCCCCCTCCCACTGCTGTTCACTGGAGCGCAGGCGAGCCGAAACAGACATGTGGGGGAGG
TGGCCCTTTGGCGCAGTGGCTCTCTGCTGCTTTGAGCCCTGCACAGCTGGACCCATCCTAAGTGGCAGTGA
GTCCCTCACAAATTTGACTTTAGAACGTGTGCTTCATGACCCTGTGACAGCGGAGGAGGAGCAACACAGCTC
TAACAGCTAGACAAATCTCGTCAGATGCTCATCTGGACCATCAGCCTCCCATTTAGCTGACTTTCCAGGGT
CGTTGGCAAAATTTTGTCTGCTCTTCCCTTGACTAATTTGAGAATTTGTGTGAGGACTTTGTTATGCAAAA
TCACAGAAATGAACCGTTTTGCAGCTGCGCAGTCTAAAGGCGAGGCCAGTGTCTGGAAGCAGGCGCCACGTGGCG
GTCCGCTGGCGAGCTGGCTCTGGGAGCATTCTCGGACCGCGGTCCAGGCTTTGTTAGTCACTGCGTACATGTGT
GCCCTTGGGGTGTCTGCACTCCAGGCCCTCTCAGCCACACTCCGACCCGAGGGTGCCTCCGAGGATCATCT
CATTTCTGATGTTGAGGCTGTTTGGCTCTGCTGTATAGCTTGTAAACAGGAGCCTTGGGCTAGGGGCTGGGGAA

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FIGURE 1398B

GGAAAGCCGAGCTGGCATTGCTTCTCTGGACTTTTTATGCCCTGCCATACCCGCTAATGCTCCTCGAGGTGCAGGA
GCAGGTTGCTGAGCCAGTGGCTGCCCGGTGCCCTCCTTCCCAGCACTATCATGTGTCACGTTTCCCGGACTCTGC
CCCTACATCTCAGCTGAATCTCCAGGGAGGCTGCAGAGCATCGTGGAGACCACITTTGCTCCTCGGCCCTTAAATG
CTGACTCACCTCCTCTCGGAGGAGGCGTCTGTCTTACGGGGGGGTCCCGGTGGCCTCCAGACGTAGCCATTTC
CTGACATCAAGATGTTGAAATGTAATCTGGTCTGAGCTGGGCCCTGTGGGAGGGGCCCTGAGGCCCTGTGCGCTGT
TGTCTTCGCGAGATGTACTTATTTTTTGTTCATGTATACGGGCGTTCCGTTCCCTTAAAGATGTATATATTTTCTTACT
GTACATAAAGATGTTCTTAACTCGTACAGAAGGTGGCGCGGCAAGGGCCTCGTGCAGTGTGTTTACAGATTGCCC
CTGGGGATCTTCTGTGTCCTCAGCGCCCCAGCCCTGCGTGTCTCTGGTGAAGCAGTTTCACATCAGTCTCTCCAGA
TAGCACTACGATGTATTCCGCTTCTGAACAGGATCCCATGCCAGTGTGGAACACCTTCCCAATCTTAGTTTCAGAA
GTGGCTTGTATGACCTGTTTCAGGGGTCACATGAGGTCTCGCCAGTTTCTGGGTCTCTTTCAGAGGCCAGAAAAGT
TCTAAGTTCTGAGTCCCGGCCAGGGTCCCTTAACACCTCGGCACAGAGGCTGTGGCAAGTGTAGAGGCTGCCT
CTGTGTGTGGTTTAAATAAAGTGAAGTGAACATTGACGTGCTGCTCCTCCAGAGGTCTGCACACTCCACTTCA
CATGCCGTTGACTCTCAGACTTCAAGACTTCAGGGCCGGGACCTTTTGTCCAGCCTGCACAGTAGAGTGAGGCTGC
CTCTCCCGCCAGGCATTGGGATCCCATTTAGAAAACGGCATTCACTTCAGAAGGTACTTTTTAACTGCTCAGTTT
TGACTATTTTAAATAGTTTGTGTAAGTCTCTGATAACACTTGTACATATCATGTTTAAATTGCTTGTACAGTT
AACCTTTAATTTTATTTAGTAAAGTGTATCAAAGTAGGACTTTTTTGAAATTGTAATAGGTGGTTTATTTAAATA
AAAGTCAATGTAAAAATGTT

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FIGURE 1399

MTDGKLTSTNGVAFMGILDGRPGNPLQNLQHVNLKAPRLLSAPEYGPKLKRLALEDRLHSQSVDSGIPTLEIGN
PEPVPCSAVHVRKQSDSDLIPERAFQSACALPSCAPPAPSSSTEREQSVRKSSTFPRTGYDSVKLYSPTSKALTR
SDDVSVCVSVSLGTELSTTLSVSNEDIOLDVVTSSSSAIVTLENDDDPQFTNVTLSSEIKETRGLHQQDCVHEAEE
GSKLKILGPFSNFFARNLLARKQSARLDKHNDLGWKLFGKAPLRENAQKDSKRIQKEYEDKAGRPSKPPSPKQNV
RKNLDFEPLSTTALILED RPANLPAPKPAEEAQKHQQYEEEMVVQAKKRELKEAQRKKQLEERCERVEESIGNAVL
TWNNEILPNWETMWCSSRKVRDLWWQGIPPSVRGKVWSLAIGNELNITHELFDICLARAKERWRSLSSTGGSEVENE
DAGFSAADREASLELIKLDISRTFPNLCIFQGGPYHMLHSILGAYTCYRPDVGYYVQGMFSIAAVLILNLDLAD
AFIAFSNLLNKPCQMAFFRVDHGLMLTYFAAFEVFFFEENLPKLF AHFKNNLTPDIYLDWIFTLYSKSLPLDLA
CRIWDVFCRDGEEFLFRTALGILKLFEDILTKMDFIHMAQFLTRLPELPAEELFASIATIQMSRNKKWAQVLT
ALQKDSREMEKGSPLSRH

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FIGURE 1400

GCTATGCGGGTGGACATCAGCTGCTATTCCGGGCCAGCGTCAAGACCGTGAAGACGCGGAACAAGGCGCTGGGA
GTGGCGGTGGGCGGCGGGTTCGATGGCAGCCGGGACGAGCTGTTCCGCGGAGCCCCCGGCCAACAGGGCGACTTC
TCCAGCCGGGCCCCGGAAGTGATTTCTCACATTGGCAAACGTAGAGATTTTCTTCTGGAAACACAGGAAAGATTAT
ATTAATGCTTATAGCCATACCATGTCTGAATATGGGAGGATGACAGACACAGAACCAGAGACCAGATAGACCAGGAT
GCCCAGATATTATGAGGACCTGTTCTGAAAGCAATTACGCAACTACGAACAGAAGCTCACAAAGGAGATACATTCC
CAGCAAGTGAAGGAGCACAGGACCGCTGTTTGGATTTTCATTGAAGATTACTTGAAAAGAGTATGTAAACTTTAC
TCAGAACAGAGAGCCATCCGAGTTAAAGAGTGGTGGATAAGAAAAGATTATCTAAGCTGGAAACCAAGCCAAAT
ACAAAGACAAGAGAATCCACATCTTCTGAGAAAGTTTCACAGAGTCCTTCAAAGACTCTGAAGAAAACCTTGCC
ACTGAAGAAGCTCCAGAAAAAATTTTGGCTGAAACACAACCTGAATTGGGAACGTGGGGAGATGGCAAAGGCGAA
GATGAGTTATCCCCAGAAGAAATACAAATGTTTGAACAGGAAAACTCAGCGACTAATTGGTGAAATGAACAGCTTG
TTTGATGAAGTGAGGCAATCGAAGGGAGAGTGGTTGAGATTTCCAGACTCCAAGAGATATTACGGAAAAGGTT
TTGCAACAGGAAGCTGAGATTGACAGCAATCACCAGTTAGTTGTGGGGGCAACTGAAAATATCAAGGAAGGCAAC
GAAGACATAAGAGAGGCCATTAATAACAACGCTGGCTTCCGCGTGTGGATCCTCTTCTCCTCGTGATGTGCTCC
TTCTCCTTGCTCTTCTCGACTGGTACGACAGCTAGCCAGGGCCACGGGGGCCAGCAGAGAGTCCCTCATGGGC
ACTCAGACTGCGTGCTTTTCATGTACTTCCAGTGCTGGAGCATGGTATGACCAGATTTTATCAGAGTGCCATTT
GAAGGGAAAGGAGTTCAGACAGACAGACGTATTCCCCAAAAGGGATACCCAGGCCGATGGTGTTACGCCATTT
AGCAGCTGAAAAAGGAAACAGTGCAACCAATGGGAGGAGCCTGCGTAGCCCTCATCAGGCAAGACAGACTGAA
TGCAGGAGTGGGTGATTAGCTGCTCCTTGAACCTTGAGGTGCTTGGCAGCAGGGGCACAGCAGGCCCTCAAGAGC
CCCTAATTGTCTCAGGGTTCAAAGGAAGACACTGACCTTTCCCATCCCGGTAGCTTCAGGGAAGATCATAGTTAA
TAACGTCTCTCAACAAATGATTACTTCTTGTTCCTTGTGGCTTCTTGTCTGCTGAGTCAACGAATACACAGA
CTTACTGGATTATAGAAGAGAAAAATCACATCTGCCTTGTTAATCTAATAAATAATTACAGCCCTTAAAAAA
AAAAA

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FIGURE 1401

MAVDITLLFRASVKTVKTRNKALGVAVGGGVDGSRDELFRRSRPKGDSSRAREVISHIGKLDRDFLLEHRKDYI
NAYSHMTSEYGRMTDTERDQIDQDAQIFMRTCSEAIQQLRTEAHKEIHSQQVKEHRTAVLDFIEDYLKRVCCLYS
EQRAIRVKRVVDKKRLSKLEPEPNTKTRESTSSEKVSQSPSKDSEENPATEERP EKILAETQPELGTWGDGKGED
ELSP EEIQMFEOENQRLIGEMNSLFDEVROIEGRVVEISRLQEIFTEKVLQQEAEIDSIHQLVVGATENIKEGNE
DIREAIKNNAGFRVWILFFLVMCSFSLLFLDWYDS

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FIGURE 1402

AGCTTAGAGGCAAAGTTAAGAGACTCATCAGATTCTGAGCTGCTGCGGGATATTTTCAGAGAAGCTGCTGTATT
GCCCAGAAGCCATCGTGTCACTGGTGGGGTCTGCGGAGGCTGGCTGCCGCGGAGCACAAAGCAGGCTCCTG
AGGCTACCTTGGCCCTTTACCGTCCGCAACCCAGAGAGCGTGCAGCTGTTCAACCACCGAGCTAGGCTGGACTGGGA
TCAGATGGGAAGTGGAAAGCTCATCATGACCAGAACTGTTCCCTACAGAGAGCACTTGGAGATGGCAATGCTGA
ACCTCACACTGTAGGACTCACACAGACTTCAACGGGCTTGTGAGAATTAAGTCACTCTCGTGGGAAGAATTTT
ATATGGGAAGCGGATAAAACTTTTATTGCACTGGAATGTTGGAAAATGTTAAATTCCAAATCAGGAACCAAA
ACTGCCCTCTAATAAGACATTGGCTATCTAAGCATGTGGGTGCCCCCTTTCTGCCAGCAGTTCTGGTTCTTAAGA
AAATCACCATAAATCAGACATGAAAATCTGGCTCCAAAAATAGCATTTCCTTGTGCAAAATAAAACGAGTGTA
TCAAGTATGACGTTCCCCAACGTGGACACACTTGTTCCTCAGAAAGCCAACTGCTGCAGCTGCCACATCCC
TGGACACACTCGTTTCTCACAAGCCAAAGCCCGCTACAGCTGCCACATCCTGGACACACTCGGTTCTCACAA
AGCCAAGCCCGCTGCAGCTGCCACATTCTGGGCTTATGGTGACGAGGTGCTTTTTTCAAGACAGGAATCAAAG
TGTAAGGAACATGGCAGAAAGGTGACACCTGGAGACCAAATGCAGGATGAGGAGTACTGCAGAGGTACAGGGGAA
GTCACAGAACAGTAATACGCTGGCAGGGGCATGGGGCATGAAGAACAGAGAAGACATTTGAGAAAAGCATCTGC
AAAACTACTAAAGAGCAGAGCTTACCTCATTTTCCTGTCCCCACCCCATCCAGGTCACCACCTGGCTGACCCAGG
TCCCCGACCCAAACAACCCCTCCCAAGTCCCTAACTCCCTTACCTGGACTTGAGACCCCTTACACCCCAAGCAG
TGCTCCGCTCCAACITTGACATCATGCTTTCTGGAAACTTCCCGTGTGCCCACTTTCCCACTTGGTGCGCT
GGAGCACCTTCCGGCTCTACATGCTGTACGTTCCCTGTGAGCACCTCCTCTCGGCTCTGGCCAAACAGTGC
CCACCCATCTGTGGTAAACAGGGGGTGTGGGTGTTCTTTTTCAGCCTTGCTAAACTGCTGAATCAAGGATCAC
AACTACAGCCTTCAGGCCAAATCCAGCCCAAGCCTGTGTTTGTAAATAAAGCTTTATTTGGAACAAAGCCACAC
CCTTAATCTACAGATGATCTGTGGCTACTTTCAGCCCAACAAGAGTACCATGGTTCTGACAGAGACTGGGGGAC
CCAGTCTAAATGACTTCCGACCTGGACCTTTACTGAAAATCCTCCCAATCATTCTGTTGACAAGAAATGATGATT
ACTTTTTTGCAATAAGAAACAAGTAACATTTCAGAAATTCACCCATCTTTCAGGCTGGTCCAGAAAGTCCCTT
TGCCCAACACCTTACCTGATCCTGACAACCTTCTAAACTGCAGCCCTGCCACCCCGGCTCCAGCATCATTTGTGG
AGTGTGAGCTCCATAAATCCAGAGGGCAGGTGGGGGTGTGCTCTAACATTTCCGAGGCTACTGTACCCGAAACGGG
ACAGCAGAGTAGGCCAGCATCTGTGACTTCTGCTCCCTCACTAGCTTTTCCACCAGACCCCAATGTTACCAACC
TGGCTGTGGGAAGCAGGATCAGGGAGTGTGGCTCGGTGCCGCTCCAGAACCCCTGCCACCCCTGGCGTGGTG
CAGACATGGTTACTGACGCTGAGCTGCCAGTTCTCTGAGTCTTCAAAGACCAGGCGTTTCTTCATGTTTCA
CTAGCTCATGTAACCTGCAGAGAGAACCAAGGAGCCTGAGAGTGCCTGGGGAAGACACAGACCCCTGGGGTG
CCCAGCTTGTCTCCACCCACCCACGCTCAAGCCAGGCTGGGGGTTGGAACAGGGGGTGTGGTTTCTGGGAGCT
GGTTCTTAGATTGGCATCTGAAGCATATAAAGGTCTGGGGAGTGACATCAAAATGGCCAAATCAATTTGAGG
AGGGAGCCCTTAAGGAAGGTTTGTACGTTCTGTGCTGGATGCTCTTCAAGTACTGAAGAATTTATTTTGCATGTTT
TTCCTAATTCATGGCCATGGAAACAGTAAAGGCAACCCCTGGGACTGGTTACGACACATAAAGATGACTTTT
CTAGGACACC

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FIGURE 1403

MAPEENAGTELWLQGFERRFLAARSLRSFPWQSLEAKLRDSSDSELLRDILQKTVKHPVCVKHPPSVKYARCFLS
ELIKKHEAVHTEPLDELYEVLAETLMAKESTQGHRSYLLPSGGSTLSEITAI ISHGTTGLVTWDATLYLAEWAI
ENPAAFTNRGVLELGSAGLTGLAICKMCRPOAYIFSDCHSRVLEQLRGNVLLNGLSLEADITANLDAPG

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FIGURE 1404

TTGTCGGTGGCTTCTCTGAGAAGAAAAGTTGAAAAAGGGTAAAAGTTTTTCAGGAATATTCTGGGCTCTCTATTGCT
AAGCATAGCGAGTGTCCGTTTTCTCTCTCCAACAGACATCGCTATTGCGGTTCCGAGGCAGTGGGAAGAGATGCG
GCCCCTGGACATCGTCGAGCTGGCGGAACCGGAGGAAGTGGAGGTCTGGAGCCCCGAGGAGGATTTGAGCAGTT
TCTGCTCCCGGTCAACAACGAGATGCGCGAGGACATCGCTGCTGCTGACGCGGAGCACGGCGGGCGTACCTGCG
GAACCGGAGCAAGCTGTGGGAGATGGACAATATGCTCATCCAGATCAAAACGCAGGTGGAGGCCCTCGAGGAGAG
CGCCCTCAACCACCTCCAGAACCCGGGCGACGCGGCCGAGGGCCGGCGGCCAAGAGGTGCGAGAAAGCCGAGGA
GAAGGCCAAGGAGATTGCGAAGATGGCAGAGATGCTGGTGGAGCTGGTCCGGCGGATAGAGAAAGCGAGTCGTC
GTGAGCGCGGTGCGGCGTTTTCCAGCCAATGGATTCTGGTCAACTGGTGGAGATTGGCTGACACCCCTGGAGAAGCC
GAAACCAGAGAGCCTTTTGTTTTCTTTTTTTCCTGTCTATGCTCTGTCTCACTTAACACTACGTTTTCTGCTAT
GGTCTGTGGTTGATGACCTCAATATGAGTTTCGATTGTTAACTGTTTTGTTTGGGAAGTAATTTGTTTGAAA
ATGCTCTCACATACAGGAATTAGGGCCTAGATTGTAAGCTCTTGACGAGTCACATTTGTTCCCGGGCTTTGGTG
GTTATTTCTAAATTTTGGAGTGCTTTGCTATTCTTGTGTGACCTGATAGCTCCCTGGAACTTTGGGCTCTGTG
GTGACACATGAGACTCACAGTTGAGTTCTCCAGCTCTGGAGGTGCTGAAGGAGCTGCATTAATTTGGAAGACG
ACTCCATGCAGCACTACTGAAGAAAGGACCAGACTTCAACGGGGAGTGTGGATGGGCCACCTGGCTGGGACTC
GTGAATCTGGAGAAGAGCTGGAGAATGGATAGTATTGTCTGTATTGGAGACTTTAATTTCTGTGTGAGACCAAA
GGAGGAGAGATGTGTTTTGTTCAAAATTTAAATTTGTTGTGGTACACTATCTTATGTAACCTGCTGGTGAGTTT
GTTTGGACAACCTAACTCAGCTTTATTTGACATGGAACCTAAAAATAGAAGATAAGATCTTGATATTCGTACAAG
TTGATGTAATACCTGATGCGTTTTAGAGGACTTGGCATAAAATGAAAGATTGGCAAGGCCCTTGAAGGGCTTG
GGGATGACAGTATGGAACCTGTCTGATTGGACCCTAACTGGACTAGAAGAGGCATCTTCAAGTTCATACGTTG
TCCAGCTGTAAGTTCAATTTGAGTAGCAGACCTAACAAATATTTGAGGTGAGAACCCTACCATTGTTAAACAAACA
AAACTTACCATGTTAATAAAAGATTCAATTGC

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FIGURE 1405

MRPLDIVE LAEP EEEVLEPEEDFEQFLLPVINEMREDIASLTREHGRAYLRNRSKLWEMDNMLIQIKTQVEASE
ESALNHLQNFGDAAEGRAAKRCEKAEEKAKEIAKMAEMLVELVRRIEKSESS

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FIGURE 1406

GTGTGGGCAACCTGTTGCTAGTCTGGTCTGTTGGTGACAGCGAGGCTTCCGCGCTCGCTGCTGGTGAGCAGCCCCG
GCGTGCCCCGCGGGCTGGAAAGAGCGGCGCGCTGATCGGCCGCTGGACGCGGACGAGGCGCGGGAGCCCCGCGA
GGAGCCGGCGAGCCGCTGAGCCCCGCGCCCGCGCCGCGGAGAACCTGGCCCTCCCTGGAGCGCGAGCGCGC
CCGGCGCAGCTGGCGGCCCGCAGGAAGCTGCTGGAGATCCAGAGCCTGCTCGACGCCATCAAGAGTAGGTTGGA
GGCAGAGGAGCGGGGCGCCCGGGCCCCAGCACCCCGCCCGCGCTGCGGAGGCTGAGGAGCGGTTGGCTCGGCTGTG
CGCCGAAGCAGAGAGGAAGGCTGCGGAGGCGGCGGATGGGCGAGCGGATCGTGGAGCTGCACCAGCGGATCGC
GGCTGCGAGTGCTGCTGAGCCGCGGAGGCCGCGGGTCTGGACGGAGCGCGCGGGGAGTGTCGCCGCTGGA
AGGCGCTGGGTAGGCAGGGAGGGGAGCGCAGAGCCGTGCCACGCTCTCCGCGGAGTTGGTTTCAATCTTTTTTCA
TAGGTAATTAGAGAAAATAATTTGATATGTTGTTGTAAGAGTCATGACCCTGGAAGTATTTTCAGGACGTAGA
CCTGGTGGGTCACTACGTGGGGGAGAGAGGTGTGAAGCGGAGGTACATGCTGGAACGCTGTAATGTTGTACG
AGATTGGAGCAATTTGCGATGACCTTCTGCAGGTGGAAGCATTGTGCACAGGTGGTTGGGTTTGGTTTGAATCTCCG
GATATGAGAAATATCAAGCTCAAAATTTATGTTGTGATGATGAATTTCTCCCACTTTGACTTTAGGTGGCCAACTG
ACGAACGTGTGTTCACTGATAAGGAGTCTGGGTGCTTTGGACAGGCTCAAAACCAAGAGAGCCTTCGTTTTGCTCT
CCCTGTTTTTCTGCCTCGTTTTTCTCCACATTAGCCACTCAATTTCCAGTACCATCCTGGCGGATGACTTCAGC
ATTAGATGGTCAGGTGATTTTTTATTAATAGGCGCATTCAGTTTGGAAAAGACAGCTTTTCATTATGTCCCA
CGTAAAGGAATATGGCCTATACAGTACGTACGCTGCTGCGTGGTCATATTTGTTCTGTGATCTTATTGTATTTT
CAAAGTTTGAAGTATACTCGTGTGCTTTGCTGTTTTTATGCTTCTCGGAATTTGGGAGCTCATGAGAGACTT
GAGGTTAGAGTCTGCAAGTGAGAAGACACTACATGTTGCAAGTGCACATGAAGAACCCAGCTCCTGTCAAA
GTTGTGAATGCGACTTTGGATGAGATTGAAGGCCAGTGGACGGTTGGCTTGAAGAGTGGCAGTGTGTGGAT
TTGAGGACCTCTGCAGACCATCAGATCAAGGAGGGAGAGCTGTTTGGGTTGTTTTGTTTTTTTGTATATAG
CAATTTGCTTTTTCTTGAATGTAATTTTCTATGGCATGTTAACTGGTGACATCGTGTAACCTGTCTGGTGAG
CAACCTACAATTTGGATGAGTTCTAGGTACATGTGTTTGTGACTTTGGGTAACCACTTTGTTATAATACAGT
CTCTGCCACAGATGCATGTGACCTTTCAGGGGCCAGAGTGGCTGAGGAAGGAAGCTTCAAGCTGGCCATGGG
GGTCCCAACAGTCATTCCAGGCTTAGATGATGACTAGCCTAGGTCATCAGAGCCAGACTCCACAGAGACTAAA
ATCAGAGCTCTGCTTGTATGATAAATTTTCAATTTGCTTGGAAAAGAAATGCTGAAGGCCAGTGTTTAGAACTCT
TTGTGCAGATGACCAAGCAATTGACTTGCCCAAGAAAAGGTAAGGTAATAAACCATTTTCAAATGAAAAAA
AAAAA

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FIGURE 1407

MRPVDADAEAREPREEPGSPSPAPRAGRENLASLERERARAHWRARRKLEIQSLDDAIKSEVEAEERGARAPAP
RPRAEAEERVARLCAEAERKAAEAARMGRRIVELHQRIAGCECC

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FIGURE 1408

ATGACCCACACCGTGCAAGGCTTGGATGTGGCTGGTCTTCTGAAAGCACTTCTCCATTAAACTTCATTCTGT
TCAGCAGAAACAGACGAGGACCGTCAGGAACACCTGGGAAGGAACGAGAATGGAAGAGCAGAGCAAGGGGCAAGG
CATACAGCCCTGCAGGGAAACCCAGAAGGCAGCCATCCCTGACAGTGAGAGCAGCTCTTGTCCTGGGAAGGCAGAT
GGGTCTGCAGAACCTGGGCCTGGCCTTGTTGGCCTCACCGGCAAGCTCAAGCTTGCCCCCAGCTGCTGATC
AAGCAAGACATCGTGTCCCTTCTTAGCAACTTTGTCAACAGGCTGTGCTTCCAGAGCTGCTGTCAACCGCAGTTT
TTTGTGCAGGAGCCACAACACCTACCCATGCAGTCCATGGACTTCTCAGGTCTCTGGGGCCCCCTCCTGGCTGTG
GCCTCCCCCGGGCTGGGTTTCTGGTGGCCCTCTGGAGTGCAAGAGACCTGGACTGGGCCGACTGGACCGTCCCA
CACCTGACCAACTGCTTATGCCTCGCATGTGTCAACGTTAACAGAGTTATTTGTATATTGGCCCCACAGTT
AAGAACCTCCTACAGATGTTACTCCACTTCTTGACAACAGGGGTGCTCAGTACTTTACGCCAAGCTGATTTT
GAGGCCCATAACTTCTCAGGGAGTCTGGGTATGCTGGGAAAATCAGCCAGATGCCCGTGATTTTGACACCATT
CATTTTGATAGGGACCCACTTCAAAAGCAGCCTTCATGCCAGAGATCTGGGTTATTCGAACCTTTATTACTAGT
GACTCCCTGACTGGTATACCTGCAACACCTGGCAATGAGATCCCTGTAGAGGTGGTATTAAAGATGGTCACTGAG
ATTAAGAAGATTCTCGGTATTTCTCGAATTATGTATGACTTAACATCAAGCCCCAGGAACACTACTGAGTGGGAG
TAA

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FIGURE 1409

MTHTVQGLDVAGLLKALPPIKLHSCSAETDEDRQEHLGRNENGRAEQGARHTALQGTQKAAIPDSESSSCPGKAD
GSCQKPGPGLVGLTGKLLKAPQLLIKQDIVSLLSNFVTRLCPFPELLSPQFFVQEPQHLPMQSMDFSGLWGP LLAV
ASPGLGFLVALWSARDLDWADWTVPHPDQLLMPRMCHNVNRVICIFGPPVKEPPTDVTPTFLTTGVLSTLRQADF
EAHNILRESGYAGKISQMPVILTPLHFD RDP LQKQFSCQRSVVIRTFITSDSLTGIPATPGNEIPVEVVLKMVTE
IKKIPGISRIMYDLTSKPPGTTEWE

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FIGURE 1410

GAGCGGCGCCGGCCTCGGCGGCTGAGGAAAGCAGGAGGAGGTGGTGGCGGCGGGAAGATGCCGCTCTTTGGCGTA
AATTGCAATCGATTAGGGATCGTTTTCTCAGAATCAAGTTAGAAGTGAGAGTTTCAGATAAGTGAGGCCGCCATTGC
TGCTTTGAACACCTCAGAAGGGGAGAAATCGATTATTCAGGAGTGAAAAAGAGAGCTTGCTGGGAGTCAAAAGAA
ATAATAAAAGTCCAGCAC TAGGGCCCTTCACCTACCAAACGCAAGACCCTCAGATGAGAAGTCCAAGGATC
GCTCAAAAGATAAAGGGGGCCACCAAGGAGTCGAGTGAGAAGGATCGCGGCCGGGACAAAACGCAAGAGGCACA
GCCTTCCAGTGGTAGCAGCAGTACCAGGTCCTCGGTCCAGCTCGACTTCCAGCTCAGGCTCCAGCACCCAGCACTG
GCTCAAGCAGTGGCTCCAGCTCTTCTCAGCCTCCAGCCGCTCAGGAAGCTCCAGCACCTCCCGCAGCTCCAGCT
CTAGCAGCTCTTCTGGCTCTCCAAGTCCTTCTCGGCGCAGACACGACAACAGGAGGCGCTCCCGCTCCAAATCCA
AACCACCTAAAAGAGATGAAAAGGAGAGGAAAAGCGGAGCCCATCTCTTAAGCCCAACAAAGTGACATTGGGA
GACTCACCAGGAATGTGACAAAGGATCACATCATGGAGATATTTTCCACCTATGGGAAATTAATAATGATTGACA
TGCCCGTGAAAGGATGCATCCCCATCTGTCCAAAGGCTATGCGTGCGTAGAGTTTGAGAATCCAGATGAAGCTG
AGAAGGCGCTGAAGCAGATGGATGGAGGACAAATTGATGGCCAGGAGATCACTGCCACCGTCGTGCTGGCCCCCT
GGCCTAGGCCAACCCAGGAGATTAGCCCTCCCAGGAGAATGTTGCCACCACCGCTATGTGGCTCAGGTTCTC
CCCCAGGATGAGGAGAAGTCCCCTCCCCGAGGCGCAGGTCCCCGTGCGCCGAGATCACGGTCCCCGGGCC
GCGCGGCCACAGGAGCCGCTCCAGCTCCAACCTCTCCCAATAACAGGCCACTGAAGCTCTCGCCCTGTAACT
TATACGCCACCCAGCTCAGTTTTGTCACTTTCTAGCCAAAGCAAGACCAGTAGGAAAGCAAAACCCCTTGACTCTG
GCAGGATTTGCAGGCAGCAGGCAGCACCCCTCTGCCAGCCGGGCTCCGGCTGCAGAAAGTGCTGTTGGCTTGGATG
CTGTGTGCTGTCAAGATTCCCTCCGTTTTCTGGCTAGAAAGCTCACCCGTTTTCCGGTTTTAAGAGTCAGTTCA
GTGGCAGAGCCACAGGGACAAGTGAGGCTCTTGGGGTGGTTTTGACCTGCTTACCTGGGAGCACACTTTTCCC
TTCCCCGATGACCTGGGATGGTGGCCAGGCCGTGCCCTTGCTGTTGCTGGGCAGTGCTTTTTGGAAAGGGAGCT
GCCCCAGGCTTTAGTGACAGTGCCAAACGCTGTTAGGCTGGGCTCTCGAGGCCCTTCTTGACTTCAAGGGTCACA
GCCCCCAAAAGATCTCTACCCATGGTAGTTGTCTGCTCATGGTTCTGTCTGCTCCGTGCACCGATGCATACACCA
CACCCACCGCTGTACTCTGAAATTTGGCAGTGAGTTGAGAGCCAGCTCTGCGGGGTCTACGCGACCATGGTT
GTGCTGTCTTATGTTGTGTTCTTTCAGGTTATCTTGGCAACATGTACATTGCTTTTATTTTTTTCTTTTTTG
TTTTATTGTACAGTCAGTCTCTATAAAATTTCTCTTTTGAGTTTATACCTTTGTAGCATTTTAGATGACATTGTG
TTTGTACTTTGTTGTGTAGAGTGGAGAATTGTGTTGAATAAACCAAGATCGGAATGC

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FIGURE 1411

MDLSGVKKKSLLGVKENKKSSSTRAPSPTRKDRSDEKSKDRSKDKGATKESSEKDRGRDKTRKRHSASSGSSST
RSRSSSTSSSGSSTSTGSSSGSSSSASRRSGSSSTSRSSSSSSSSGSPSPSRRRHNNRRRSRSKSKPPKRDEKE
RKRSPSPKPTKVHIGRLTRNVTKDHIMEIFSTYGIKIMIDMPVERMHPHLSKGYACVEFENPDEAEKALKHMDG
GQIDGQEITATVVLAPWPRPTPRRFSPPRMLPPPPMWLRSPPRMRRRSRSPRRRSPVRRRSRSPGRRRHRSRSS
SNSSQ

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FIGURE 1412

CTCCACCCCTGTGGGCTGTAAGCAAGCTCAGGCTAGTCTCCCACTGGGGGCTGTGCCCCCTCCCTGGGACGGTTCC
GTGGGCAGCCCCATCACTGTGTTCAATAGTGTGAGAAATGAGCTGCGTGGGGACAATCCATCGTGGAGTGTTCTC
TCAGCTTAGGTCTGGACAGGAGACTTGGCGGGAGATGCTCCAGGATGTGGGTGATTCTGTACCTGGGGAGGCTAT
CTCTGACCTCCCGACAGGGGACACTCCAGGCCAGCCAGGGGTCAGGGGCAGAGGTGCACACCTCAGCATGAGC
CAAGACTGGGGTCAGGGAGCAGGTGTGGTTGAGCCAGGACCTGGGSCGGGGTGGGGCCGGGGCCTTCTGCCT
CATTTGCTTTCAATGAAAGCCTCAAAGCAGCCAAAACCAGGCTTCCCCCTTCCTCGAGTTTGAATATCCAGAAT
CTTTTGTACTTCTTGTGGTTAAATTGTTATTTTGTAAAAATAAAATAAAATTAGTTAATAA

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FIGURE 1413

ATAGAAGACTACTCGGAGAGCGCTGCCTCTGGGTTGGCGGGCTGGCAGGCTGTAGCCGAGCGCGGGCAGGACTCG
TCCCGGGCAGGGTTCCAGAGCCATGGGAGCGGAAAGGAGGCTGCTGTGCATTAAAGGAGGCTTTCCGGCTGGCGCAG
CAGCCGACACGAAACAGGCGGAGGCTGGTGGTGGCGCTGAGCCGCACCTTACCGCACCATGGATGATAAGACAGTT
TTTCATGAGGAGTTTCATTACCTTAAATATGTTATGGTGGTCTATAAAGCTGAACAGCTGTGGAGAGGGTA
ATAGAATTTGACGAAAAGTTGTGTACCTCATTCCACCAATCAGATATGGAAGATGATGAGGAAGAGGAAGATGGT
GGCCTTTTAAATTATTTGTTACTTTTCTCTTAAAGTCTCATGAAGCAAACAGCAATGCATGAGATTAGAGTGT
TGCTGTCTATAAAACAAAGCTTTTGGGAAGTATGCCAGAAAATGCTCAGATTGATGATGATGTGTTTGATAAAAT
AATAAGCCATGCTTATTAGATTGAAGAGTAAGATTCCAAATGTGAAGATACAGGAGCTTCGGCGCTTTCACGA
CTTCAGGATCCCAAGATGATGAATGCCAGTGGTTAATGCATATGCTACTTTGATTGAAATGATTCAAATCCA
GAAGTTAGACGGGCAGTGTTATCATGTATTGCACCATCAGCAAAAGACTTGGCCAAAATTTGATAGGCGCAACGAAG
GATGTGAAAAGGCTGTGCAAAAGCTGGCTTATCAGGTTTTAGCTGAAAAGGTTTCATATGAGAGCTATGTCCATT
GCTCAGAGAGTAATGCTCCTTCAACAAGGCTTAAATGACAGATCAGATGCTGTGAAACAGCTATGCAGAGAGCAT
CTTCTTCAAGGCTGGTTACGGTTCTCTGAAGGAAATATCTAGAGTTGCTCCATCGGTTGGATGTAGAAAATTTCT
TCTGAAGTGGCAGTCTCTGTTCTCAATGCCTTGTTTTCAATACTCCTCTCAGTGAACTGGTGGGACTCTGTAAA
AACCAATGATGGCAGGAATTTGATCCAGTGGAAACATTAACTCTGAAATTTGATTGTTGGTGTGGCTTTTGT
GAATATTGAAATCAAAAGAGATGAAGGTGAAGAAATTTTATGACGAGATTTTGCCAGAGCTGTAGTATATGCA
GACTATTATTGAGTTACATCCAGACGATTCAGTGTGTTAATGAAGAACACAGAGGTGATTTTCTATATTGGA
AATTTGATGACAAAGAAATTCATAGGTCAACAATTGATTTAATTAAGCTTTTGGATACCGATGAAGAGGA
GGAAGAAAAAACTGCTGGCTGTTTACAGGAGATCTTATTTTACCACAATCCCAATATCCCTGGTTCTTTT
CTTGTGAAAGACTACTCCACATCATTATAGTGATAATAAGAGAACCAAAATTTGTCAGAAAATATCTCAGAG
ATTCGGCGGCCATTGTTACTGTTGGTGTAAATAACGATCCAGCTGATGTGAAGAAAGAAAGACTCAAGATGGCT
GAAATAAAAGTTAAGCTTATCGAAGCCAAAGAGCTTTGGAATAATGCATTACCTTACAGGATTTTAAATCGGGCA
TCAGAATTAAGAGAAAGAAATAAAGCATTAGAAGATGCCAGAAATAAACCTTTGAAAGAGACAGCAACTTGAA
ATTAAGGAAGTCCACATAGAGAAGATGATGCTGAAACATTGCAGAAATGCTTATTTATGCTATGAATGTTG
AAGCAGATGTCCATTTTCAACAGGCTTAAAGTGCAACCATGAATGGAATCATCGAATCTTTGATTCTTCTGGAATA
ATAAGTATTCATCTGTTGAAGAAACCTGGCTGTTTATGCTTGGGATGCTGTGGACTCAGAAATCAGGATTTT
GCAAGGAAACACTTCGTATTACATTGCAAGTTTTCGAAATGATGATGTCAATAAAAAATAAGTGTCTTAAAG
GCAATCTTTGACCACTGATGACGTTTCGGGATTGAACCATTTAAACATAAAAAATAAACACTTCATTGTTGAA
GGTACAGAAATAAACAGTGATGATGAGCAAGAAATCAAAAGAGTTGAAGAGACTGCTACAGCTAAGATGTTCTG
AAACTCCTTTCTGATTCTTAGATAGTGAAGTATCTGAACTTAGGACTGGAGTGCAGAGAGGACTAGCCAAAGCTG
ATGTCTCTGGGCTTTGGTCAGCAGCAGGATTTCTTCTCGTCTTATTGTTGATTTGGGTACAATCTCTGTGACTGAA
GAGGATGTTCACTTCGACATTGCTTAGGCGTGTCTTCCCCGTGTTTGTCTTGAAGCAGGAGCTAATCAGGAA
TGCTTTGAAGAAGCTTTTCTTCAACCCCTGCAAACTGGCCATGCCCTGCATCTTCTCCTTGAAGTGAAT
GATATCAGAAATGTTGCTGAGTTACTGTGATGATTGCAAGCAAGTGGATTAAATCCTCAGGCCAAGACTTCC
CAAGTATCTCAGGCTTAAACAGTACATGACAAATTTGGCTATGAAAATTTGCAATGAGATCTTAAACAGTCCGTCG
TCGCCAGAAATTCGAGTCTTACAAAAGCCTTGAGTCTTTAGAACTCAGTAGCCATCTTGCAAAAAGATCTTCTG
GTTCTATTGAATGAGATTCTGGAGCAAGTAAAGATAGGACATGCTGAGAGCTTTGGAGAAAATCAAGATTGAG
TTAGAAAAGGAAATAAAGAAATTTGGTGACCAAGCTGAAGCAGCAGGATGCCACCTTGACTACAACACTTCTC
CAAAATGAAGTGAAGAAAGATAAAGAGTAATATAGCTCCATCAGGGGTGTAAGAGCAACCCAGCATCAAG
TCTACTCAGCTAAAGACTAACGAGCAGAGAAAAGTGACAGTTTCAGCTAGGACGAACAGGAGGTCTGAGACT
GCTGAAGCCGACTCTGAAAGTGATCATGAAGTTCCGAACCAAGATCAGAAATGAAGATGAGACTACCAAGACGA
GCCAAACCGCAGCTAGAAAAAGTAACTTAACTTGGCCAAATTTCTCAATGAAGATCTAAGTTAGGAAAGA
CGATGGAGGTGGAAATCTTTAAGATTATGTCAGGTTATTGCTTTAATAAAGAGAAAGTACCCCTTGTCAAAATC

AG

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FIGURE 1414

GGCACGAGAACATGCGGCTCCACTAGGGGTATGTTTTCTGGGCAGCCACCGGTCCCCCTCAGGCCCGGCCG
GCCTTCCGGGCCAAGCTTCGCTTCTTCAGGCAGCTCCAGGCGCTCCTAGACCTTCCAGCAGTACTTTGGTGGACG
AGTTGGAGTCATCTTTCGAGGCTTGCTTTGCATCTCTGGTGAGTCAGGACTATGTCAATGGCACCAGTCAGGAAG
AAATTCGAACCGGTGTGTGATCAGTGTATCCAGAAATTCTGGATATTGCAAGACAGACAGAATGTTTTCTTAC
AAAAAGATTGCAGTTATCTGTCCAGAAACCAGAGCAAGTTATCAAAGAGGATGTGTCAGAACTAAGGAATGAAT
TACAGCGGAAAGATGCACTAGTCCAGAAAGCACTTGACAAAGCTGAGGCATTGGCAGCAGGTGCTGGAGGACATCA
ACGTGCAGCACAAAAAGCCCGCCGACATCCCTCAGGGCTCCTTGGCCTACCTGGGAGCAGGCATCTGCCAACATC
CCTGCACCTCTGAAGCCAACGTGAGCAAGGGCAGAGGCAGTTGGCCTATGAGTGGGCTGATGCGTGAAGGXTGGC
CACACATTCTCTGTGGACTTGACATTTTGGAAAGAACTTTTGCCAGATAATGAGTTCATTTTAGTTTTATG
CTCCCATTTGAAAAATTTTCCACTATTTTATAAGCTGTTAATTTCTTGAGTACTTTATAACATGCTGTAGCTTG
GATAAACCAAGTAAGTATTTAAAAA

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FIGURE 1415

MAAPLGGMFSGQPPGPPQAPPGLPGQASLLQAAFGAPRPSSSTLVDELESSFEACFASLVSQDYVNGIDQEEIRT
GVDQCIQKFLDIARQTECFFLQKRLQLSVQKPEQVIKEDVSELRLNELQRKDALVQKHLTKLRHWQQVLEDINVQH
KKPADIPQGSLAYLGAGICQHPCTSEANVSKQRQLAYEWADA

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FIGURE 1416

CCTAGACGCACGTC CGCTCGCCCGGCGCCGAGCCAGTCCGCGCGCAGCCGCTCTGCGCCCGGAAAGCCCGCC
 CAAGGCGCGCCCGCCACCGCTCTCCACGTGCTCGCTGGAGGCGGTGCGAGGGGCGGAGCCGACAAAGATGTTCT
 TGCTGCCTCTTCCGGCTCGGGGCGAGTAGTCTGCCGAGCTCTGGCCGTGAGACGTTTCGGGAGCCGGAGTCTCT
 CCACCGCAGACATGACGAAGGGCCTTGTTTAGGAATCTATTCCAAAGAAAAAGAGATGATGTGCCACAGTTCA
 CAAGTGCAGGAGAGAATTTGATAAATTGTTAGCTGGAAAGCTGAGAGAGACTTTGAACATATCTGGACCCCTC
 TGAAGGCAGGGAAGACTCGAACCTTTTATGGTCTGCATCAGGACTTCCCGAGCGTGGTGTAGTTGGCTCGGG
 AAAAGGCAGCTGGAATCGACGAACAGGAAACTGGCATGAAGGCAAGAAAAACATCAGAGCTGCTGTTGACGCG
 GGTGACAGGCAGATTCAAGACCTGGAGCTCTCGTCTGTGGAGGTGGATCCCTGTGGAGACGCTCAGGCTGCTGCGG
 AGGGAGCGGTGCTTGGTCTCTATGAATACGATGACCTAAAGCAAAAAAGAGATGGCTGTGTCGGCAAGCTCT
 ATGGAAGTGGGGATCAGGAGGCCCTGGCAGAAAGGAGTCCGTGTTGCTCTGCGGAGAACTTGGCACGCCAATTGA
 TGGAGACGCCAGCCAATGAGATGACGCCAACACAGATTGCTGAAATTATTGAGAAGAATCTCAAAAGTGTAGTA
 GTAAAACCGAGGTCCATATCAGACCCAACTCTTGGATTGAGGAACAGGCAATGGGATCATTCTCAGTGTGGCCA
 AAGGATCTGACGAGCCCCAGTCTTCTTGGAAATTCATACAAAGGCAGCCCCAATGCAACGAAACACCCCTGG
 TGTTTGTTGGGAAAGGAATTACCTTTGACAGTGGTGGTATCTCCATCAAGGCTCTGCAAAATATGGACCTCATGA
 GGGCTGACATGGGAGGAGCTGCAACTATATGCTCAGCCATCGTGTCTGCTGCAAAAGCTAATTTGCCCCATTAA
 TTATAGGTCGCGCCCTCTTTTGTGAAAATATGCCAGCGGCAAGGCCAACAGCCGGGGATGTTGTTAGAGCCA
 AAAACGGGAAGACCATCCAGGTTGATAACACTGATGCTGAGGGGAGGCTCATACTGGCTGATGCGCTCTGTTACG
 CACACACGTTTAAACCGGAAGTCACTCTCAATGCCGCCACCTTAACAGGTGCCATGGATGTAGCTTTGGGATCAG
 GTGCCACTGGGGCTCTTTACCAATTCACTCTGGCTCTGGAACAACTCTTCGAGGCCAGCATTGAAACAGGGGACC
 GTGCTCTGGAGGATGCTCTCTTCTGAACATTATACAAGACAGGTTGTAGATTGCCAGCTTGCTGATGTAAACA
 TGGAAAAATACAGATCTGCAGGAGCATGTACAGCTGCAGCATTCCTGAAAGAAATTCGTAACCTCATCTTAAGTGG
 CACATTTAGACATAGCAGGCGTGATGCCAACAAAGATGAAGTTCCTATCTACGGAAAGGCATGACTGGGAGGC
 CCACAAGGACTCTCATTGAGTCTTACTCTGTTTCAGTCAAGACAATGCTTAGTTCAGATCTCAAAAAATGTCTT
 CACTCTGTCTTAAATTGGACAGTTGAACTTAAAGGTTTTTGAATAAATGGATGAAAATCTTTTAAACGGAGACAA
 AGGATGGTATTTAAAAATGTAGAACAATGAAATTTGATGCTCTGATTTTTTTTCACTTTCACACAAAGATTT
 ATAAAGGTAAGTTAAATATCTTACTTTGATAAGGATTTTAAAGATCTCTATAAATGATTAAAAATTTTGAACCT
 CCTAATCACTTTTCAAGTATATGTTTTTCTTGAAGCAAAATTTGTAACCTCAGATTGTGATGCTAGGAACAT
 GAGCAAACTGAAAATTACTATGCACTTGTGAGAAACAATAAATGCAACTTGTGTTG

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FIGURE 1417

ATTCCGAGCTGCGGGAGCCGGGCTGGCAGGAGCAGGATGGCGGGCGGGCGGCTGCAGGCGAGGGCGCCGGGTG
CTGGTGTACGGCGGCAGGGGCGCTCTGGGTTCTCGATGCGTGCAGGCTTTTCGGGCCCCGAACCTGGTGGGTGCC
AGCGTTGATGTGGTGGAGAATGAAGAGGCCAGCGCTAGCATCATTGTTAAATGACAGACTCGTTCACTGAGCAG
GCTGACCAGGTGACTGCTGAGGTTGAAAGCTCTTTGGGTGAAGAGAAGGTGGATGCAATTCTTTGCGTTGTCTGGA
GGATGGGCCGGGGCAATGCCAAATCCAAGTCTCTCTTTAAGAAGCTGTGACCTGATGTGGAAGCAGAGCATATGG
ACATCGACCATCTCCAGCCATCTGGCTACCAAGCATCTCAAGGAAGGAGGCCCTCCTGACCTTGGCTGGCGCAAAG
GCTGCCCTGGATGGGACTCCTGGTATGATCGGGTACGGCATGGCCAAGGGTGTGTTTACCAGCTCTGCCAGAGC
CTGGCTGGGAAGAACAGCGGCATGCCGCCGGGGCAGCCGCCATCGCTGTGCTCCCGGTTACCCCTGGATACCCCG
ATGAACAGGAAATCAATGCCTGAGGCTGACTTCAGCTCCTGGACACCCTTAGAATTCCCTAGTTGAAACTTTCCAT
GACTGGATCAGAGGAAAAACCGACCCGAGCTCAGGAAGCCTAATCCAGGTGGTAACACAGAAGGAAGGACGGAA
CTACCCCAAGCATATTTTAGGCCTCATCTAGTGCCATGAGGGGCGCTGCCAGAAAAGTCACTAACCTGTCTCA
GTGTGGCCTTGTCCAGCCTTGTTTCTGTAACCCCTGTTTGTGGTACGAGATAATGAGTCCTATTTTTCTCTC
ACATAATATGCATTTGCTCTCCTAGGACAGTGAATACATTTATGTGAAGTAAAGACATGCGAGACTGGTGGCCCT
GCAAAATAGCATCCGTTGATCTGTGTTAACTGCATAGGGAGGGCTCTGCATAGCACCTGCTATAGCGGTGTCATGT
TGGATCGCTTTTGTGACTGTTTCATCTGTCCTTGACAGTGGCTGTCATCTTGACTACTTTGTTGATTTGTTGGTAT
TGGGGACATTTTAAAGGCTGAGTTATTTTGAATGTGATGTTTATGTCATAGACGTAGTTTTCGCATCCTTGAAT
TAACTGCCTTAACTCCTTTTGGTATAAGCAAACTACATGGACTCTGCTCGGTATCCTTTTCTGTGTGGT
TGCCCGTGTCTCTGGCCTAGGTTAAGTGTGCAAGATAACTACTCGTGAGTATTCAGAATGTTGTTCTTAATA
AATGCACCTTGTGCTCTCTTTAATCAAATCACATCTTATATACAGCAGTCAGAGATGAGTATACTAGAATC
ATGGATTGCTGGAGGTCTTTAATCTGATGTTCTCAGAAGGGGTGGATTAAATCCTGAAATAAATATTTCAAC
AC

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FIGURE 1418

ACAGTCCCTCCGGGTGGCGGGGCGCCCCGAGCGTGGCAGCGCGCTAGGCGGCAGCAGCGGGCGCGGAGCGGGGCG
CGGCCGCCGCGCGTTCCCTCTTGGCGGGGTTGGCCGGCCGGGGCGGGGCGCGCGCTCGGGCTCAGAGCATTCCG
AGCTGCGGGAGCCGGGCTGGCAGGAGCAGGATGGCGGCGGCGCGCGCTGCAGGCGAGGCGCGCCGGGTGCTGGTG
TACGGCGGCAGGGCGCTCTGGGTTCTCGATGCGTGCAGGCTTTTCGGGCTCGCAACTGGTGGGTTGCCAGCGTT
GATGTGGTGGAGAATGAAGAGCCAGCGCTAGCATCATTTGTTAAATGACAGACTCGTTCACTGAGCAGGCTGAC
CAGGTGACTGCTGAGGTTGGAAAGCTCTTGGGTGAAGAGAAGGTGGATGCAATTCTTTGCGTGTCTGGAGGATGG
GCCGGGGCAATGCCAAATCCAAGTCTCTCTTTAAGAACTGTGACCTGATGTGGAAGCAGAGCATATGGACATCG
ACCATCTCCAGCCAICTGGCTACCAAGCATCTCAAGGAAGGAGGCCCTCCTAACCTTGGCTGGCGCAAAGGCTGCC
CTGGATGGGACTCCTGGTATGATCGGGTACGGCATGGCCAAGGGTGCTGTTCACCAAGCTCTGCCAGAGCCTGGCT
GGGAAGAACAGCGGCATGCCGCCCGGGGACGCCCATCGCTGTGCTCCCGGTTACCCCTGGATACCCCGATGAAC
AGGAAATCAATGCTGAGGCTGACTTCAGCTCCTGGACACCCTTAGAATTCTAGTTGAACTTTCCATGACTGG
ATCACAGGGAAAAACCGACCGAGCTCAGGAAGCCTCATCTCAGTGCCTATGAGGGGCTGCCAGAAAAGTCACTA
ACCTGTCTCAGTGTGGCCTTGTCCAGCCTTGTGTTTTCTGTAACCCCTGTTGTGGTACGAGATAATGAGTCTTA
TTTTTCTCTCACATAATATGCATTTGCTCTCCTAGGACAGTGTAATACATTTATGTGAAGTAAAGACATGCGAGA
CTGGTGGCCTGCAATAGCATCGTCAATCTGTGTTAACTGCATAGGGAGGCTCTGCATAGCACCTGCTATAGCG
GTGTCATGTTGGATCGCTTTTGTGACTGTTTCATCTGTCTTGACAGTGGCTGTATCTTGACTACTTTGTTGATT
TGTTGGTATTGGGACATTTTAAAGGCTGAGTTATTTTTGAATGTCATGTTTATGTATAGACGTAGTGTTCGCA
TC

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FIGURE 1419

GGCACGAGCGCAACCAAGCAGCGCAGGGCAGGCGCGAGCTGGCCTCTGAGCCCCGGCCCTCGGACCGGCCACTCCA
CTCCCCGGCAGCCCGGTGCCGCTTCGGGCTCCAGTCCCCGGGCTCGGCTCGGCGAGGTGTAAATTCGACGGCG
GGCCGGCCCGGAGGGCTCTCGGCGAGCGCGGCGCGGTAAACAAGTGGCGGAGGATGCCGTACAGAGATCAAGAAGGT
GTTTCGCCAGCCTCCCCAGGTGGAGAGGGCGCTCTCCAAGATCATCGGCGCGACCTCAAGGGCAACAATTTTCT
GTACACCAATGGAAAGTGGCTCATCTTAAGGAACATCGACAACCCAGCCCTTGCTGACATCTACACAGAGCACGC
CCATCAGGTGGTGGTGCCCAAGTATGCGGCCAGCGGATCTACATTGCTCCGGAGATGTGTCTGGGAAGCTGAG
GATCTGGGATACCAAGCAGAAAGGACACCTGTTGAAGTATGAGTACCAAGCTTTCGCTGGGAAGATCAAAAGCAT
TGCTTGGACTGAAGACATGAAGGATCGCCGTGGTGGGGAAGGAAGGAGAAGTTTGGAGCAGTCTTCTCTG
GGATAGTGGCTCTTCTGTGGCGAGATTACAGGACACAACAAGTCATCAACAGCGTGAGCATCAAGCAGAGCCG
GCCATACGGGCTGGCCACGGGAAGCGATGATAACTGCGCGGCATTCTTTGAGGGACCCCATTCAGTTCAAGTT
CACAATTTGGCGACCAAGCCGCTTTGTCACTGTGTGCGATTCTCTCTGATGGGAACAGATTGGCCACAGCCAG
TGCTGACGGCCAGATATACATCTATGACGGGAAGACTGGGGAGAAGGTGTGCGCGCTGGGCGGAAGCAAGGCCCA
CGACGGTGGGATTTACGCAATTAGTTGGATCCCGACAGCACCCATTGCTCTTCTGCTTGGGGACAAAATCTC
CAAGATTGGGACGTCAGCGTGAACCTCGTGGTCAGCACATTTCCCATGGGCTCCACGGTCTCGACAGCAGCT
GGGCTGCCTATGGCAGAAAGCACCTCTCACTGTCTCCCTGTCCGGGTACATCAACTATCGGACAGAAACAA
CCCCAGCAAGCCCTGCGAGTCACTGAAGGTCACAGTAAATCGATCCAGTGTCTGACGGTGCATAAAACGGCGG
CAAGTCTCATATTACTCTGGGAGCCAGCAGCGACACATTAATTACTGGGATTGAGAGCGGGGGAGAAGCAGCTC
CTTCTGCTGGAAAGGCCACACGAACAGGTGTCAGGATGACCTGGATGAGTCGGGGCAGCTCATCAGCTGCAG
CATGGACGACACCGTGCGGGTACACAGCCTCATGTGCGGGACTACAGCGGACAAGGAGTTGTGAACCTGGACGT
TCAGCCAAAGTGGCTAGCCGTGCGCCCCGGGGGATACGCGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT
GGATCAGAGGAAGTGCTTGCAGCATGCACAACCCCGGCTACGAGCCCGAA GTTGTGGCAGTGACCCCGCGGGGA
CACGGTGGCAATTGGGGGTGTGGACGGCAACGTCGCCCTGTATTCCATCTGGGACACCGCTGAAGGATGAGGG
CAAGCTCTTGAGGGCCAAAGGGCCCGTGACCGACGTGGCCCTACTCCAGCAGCGCGCCCTCTCGCGGCTGTGCGA
CGCCAGCAAGGTGGTCACAGTGTTCAGCGTGTCTGACGGCTACTCGGAGAACAAATGTTTTTATGGACACCATGC
AAAAATCGTCTGCCTGGCTGGTCCCGACAGCAATGAACACTTTGCCTCCGGTGGCATGGACATGATGGTGTATGT
TTGGACCTCGAGTGACCCGGGAACAGAGTCAAGATCCAAAGTGCACACCGGCTGCACCATGTGACGAGCCTGGC
CTGGCTGGACGAGCACAGCTGGTCAGCACTCCCATGATGCTCTGTCAAGGAGTGGACAAATCACCCTAGAGG
AGCCCCACCCCGCCTCTGGATGGACCGAATCAGGCCTAGAGTTAACTGCAGCGGAACATGTCAATTTCTCTAT
TTCTGTGACGCGCCCCCATGCCCCACCCACACACAAGAGGCGAGGAGGCCAGCTCATGACCCCTGCTCTGCGAG
GGTGTCTGTACACGTTCTTCTGAAAGCTTTAGACAGTAACAGTTTGACATGAAAAATAAGCGAGCACCTAAAC
AATGTGTGGAGCATAACTAAACCCACAGCCCAACCAACCTTGAGAATGCGAACAATTTACAACTAGTGGCTGCT
CCAAAGCACACAGAGCCCTTGCCCGCGCGCGGCTCTCACTATCTGTGAGGGGAGGTGTGACAGGTGAATGAGCG
GGGGGGCTCATGTTCTGCTGCAAGACATTTCTGTACTAGTGAGAAAGGGAATATGCAATTTGAGCAAA
GCCGGAATCTGTGTTGAACAGATGTGCTCTCCCTAGTGTGTGACTCACACCTTGTGGCTGCCTTCAGAGCGCC
ACCTCAGATCAGATGGGACACACAACCCCTGGATGTGTTTCATTGTGACAGATTTTGTGCTGATTTTAAAGAT
GAATTTGGGGTATCTTTCTTTTTTTTAAATGATCTTAACCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCTGTGCT
ACGGCACCGGTGTCCAAGTTTTAGAACCTTGTAGCCAGACGAGGTGCTCTGGTCAACGCTTTCACCATCATGC
TTTGATGTTCCCTGTCTTTCCCTCTTCTGCTCTCAAGAGCAAGGTTAAATTAAGGACAAAGATGAAGTCAGT
TAAACTAATCTGTGATGTTTTTACCTTCTTTCTTTCTTCAGTGAGAAATTAAGTAAGTATAAGCACCGT
GATTGGGAGTGTTTTGCGTGTGTGCGAATCACTGGTAAATGTTGGCTGAGAACATCCCTCCCTTGCATTTGT
GAAAAACATTTGAGCGCTTTAAGAGATAGCCTGAGAAATAATTAATATCTTTCTCTTCAAAAAA

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FIGURE 1420

MPYEIKKVFASLPQVERGVSKIIGGDPKGNFLYTNGKCVILRNIDNPALADIYTEHAHQVVVAKYAPSGFYIAS
GDVSGKLRIWDTTQKEHLLKYEQPFAGKIKDIAWTEDSKRIVVGEGREKF GAVFLWDSGSSVGEITGHNKVIN
SVDIKQSRPYRLATGSDDNCAAFEGPPFKFKFTIGDHSR FVNCVRFSPDGNRFATASADGQIYIYDGKTGEKVC
ALGGSKAHDGGIYAISSWSPDSTHLLSASGDKTSKIWDVSVNSVSVSTFPMGSTVLDQQLGCLWQKDHLLSVSLSGY
INYLD RNNPSKPLHVIKGHKSISQCLTVHKNGGKSYIYSGSHDGHINYWDSETGENDSFAGKGHTNQVSRMTVDE
SGQLISCSMDDTVRYTSLMLRDYSGQGVVKLDVQPKCVAVGPGGYAVVVCIGQIVLLKQQRKCFSIDNPGYEPEV
VAVHPGGDTVAIGGV DGNVRLYSILGTTLKDEGKLLKAGPVTDVAYSHDGAFLAVCDASKVTVF SVADGYSEN
NVFYGHHAKIVCLAWS PDNEHFASGGMDMMVYVWTLSDPETRVKIQDAHRLHHVSSLAWLDEHTLVTTSHDASVK
EWTTY

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FIGURE 1421

GGCACGAGCGCAACCACAGCGCGCAGGGCAGGGCGGAGCTGGCCTCTGAGCCCCGGGCTCGGACCGCCCACTCCA
CTCCCGGACGCCCGGTCGCCCTTCCGGCTCCAGTCCCCGGGCTCGGCCCTCGGCAGGTGTAATTCGACGCGCG
GGCGCGCCCCGGAGGCTCTCGGCAGCGCGCGGTAAACAAGTGGCGAGGAGCGCGTACGAGATCAAGAAGGT
GTTCCGACGCTCCCGCAGGTGGAGAGGGGCGTCTCCAAGATCATCGCGCGCGACCCCTAAGGGCAACAATTTTCT
GTACACCAATGGAAAGTGCCTCATCTTAAGGAACATCGACAACCCAGCCCTTGTGACATCTACACAGACGACGC
CCATCAGGTGGTGGTGGCCAGATATGCGCCACGCGGATTCTACATTGCCTCCGGAGATGTGTCTGGGAAGCTGAG
GATCTGGGATACCACGACGAGAAGGAGCACTGTTGAAGTATGATACACGCCCTTTCGCTGGGAAGATCAAGACAT
TGCTTGGACTGAAGACAGTAAGAGGATCGCCGTGGTGGGGAAGGAAGGAGGAAAGTTTGGAGCAGTCTTCTCTGT
GGATAGTGGCTCTTCTGTGGCGGAGATTACAGGACACAACAAGTCATCAACAGCGTGGACATCAAGCAGAGCGG
GCCATACCGGCTGGCCACGGGAAGCGATGATAACTGCGCGGCATTCTTTGAGGAGCCCCATTCAAGTTCAAGTT
CACAAATTGGCGACACAGCCGCTTTGTCAACTGTGTGCGATTCTCTCTGATGGGAACAGATTGGCCACAGCCAG
TGCTGACGGCCAGATATACATCTATGACGGGAAGACTGGGGAGAAGGTGTGCGCGCTGGGCGGAAGCAAGGCCCA
CGACGGTGGGATTACGCAATTAGTTGGAGTCCCGACGACACCCATTGCTTTCTGCTTCTGGGGACAAAACITC
CAAGATTTGGGACGTGACGCTGAACCTCGTGGTCAGCACATTTCCTATGGGCTCCACGGTTCTGGACACGAGCT
GGGCTGCTTATGGCAGAAGGACCACCTGCTCAGTGTCTCCCTGTCCGGGTACATCAACTATCTGGACAGAAACA
CCCCAGCAAGCCCTGACGCTCATCAAGGTCACAGTAAATCGATCCAGTGTCTGACGGTGCAATAAAAACGGCGG
CAAGTCTACATTTACTCTGGGAGCCACGACGGGACACATTAACTACTGGGATTACAGAGACGGGGAGAAGCAGCTC
CTTCGCTGGGAAAGGCCACACGAACAGGTGTCCAGGATGACCGTGGATGAGTCGGGGCAGCTCATCAGCTGCAG
CATGGACGACACCGTGGCGTACACCGCCTCATGCTGCGGGACTACAGCGGACAAGGAGTTGTGAACCTGGACGT
TCAGCCAAAGTGCGTAGCCGTGCGCCCCGGGGGATACGCCGTGGTGTGTCATTGGACAGATTGTCTGCTGAA
GGATCAGAGGAAGTGCTTCAGCATCGACAAACCCGGCTACGAGCCGGAAGTTGTGGCAGTGCAACCCGGCGGGGA
CACGGTGGCAATTGGGGGTGTGGACGGCAACGTCCGCTGTATTCATCCTGGGCACACGCTGAAGGATGAGGG
CAAGCTCTTAGAGGCCAAGGGCCCGTGACCGACGTGGCCTACTCCACGACGCGCCTCTCTCGCGGTGTGCGA
CGCCAGCAAGGTGGTCAAGTGTTCAGCGTTGCTGACGGCTACTCGGAGAACAATGTTTTTATGGACACCATGA
AAAAATAAGCGAGCACCTAAACAATGTGTGAGCATAACTAAAACCCACAGCCCAACCAAAACCTTGAGAATGCGA
AACATTCCAGAGGCGAGTAGCTCCAAAGCACACAGAGCCCTGGCCCCCGCGGCTCTCACTACTCTGTGAGGGG
AGGTTGTACAGGTGAATGAGCCGGGGGCTCATGTTCTGCTGCAGAACATTTCTGTACTAGTGAGAAGAGGGA
ATATGCATTGCAGTTACGAAAGCCGGAATCTGTGTTGAACAGATGTCTGCTCCCTAGTGTGTGACTCACACC
TTGTGGCTGCCTTCAGAGCGCGACCTCCAGATCAGATGGGGACACAAACCCCTGGATATGTTTCATTGTGAGAT
TTGTGCTTGAATTTAAGAATGGAATGTGGGTATCTTCTCTTTTTTTTAAATGATCTTAACTGTGTGCTGTCA
GTGTTTACAAGATAGTGCCTGACGGCACCGGTGTCCAAGTTTTTGAACCCCTGTTAGCCAGACCGAGGTGTCT
GGTCACCGTTTACCATTATGCTTTGATGTTCCCTGTCTTCCCTCTTCTGCTCTCAAGAGCAAGGTTAATTT
AAGGACAAGATGAAGTCACTGTAACTAATCTGTGATGTTTTTACCTTCTCTTTCTTTTCAGTGCAGAAAT
AAAAGTAAGTATAAGACACCGTGATTGGGAGTTTTTTCGCTGTCTCGGAATCACTGGTAAATGTGGCTGAGAA
CAATCCCTCCCTTGCATTTGTGAAAACACTTTGAGCGCTTAAAGAGATTAGCTTGAGAAAATAATTAATATCTT
TTCTCTTCAAAAAAAAAAAAAAAAAA

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FIGURE 1422

MPYEIKKVPASLPQVERGVSKIIGGDPKGNNFLYTNGKCVILRNIDNPALADIYTEHAHQVVVAKYAPSGFYIAS
GDVSGKLRIWDTTQKEHLLKYEYQPFAGKIKDIAWTEDSKRIAVVGEGREKFGAVFLWDSGSSVGEITGHNKVIN
SVDIKQSRPYRLATGSDDNCAAFFEGPPFFKFKFTIGDHSRFVNCVRFSPDGNRFATASADGQIYIYDGKTGEKVC
ALGGSKAHDGGIYAIWSWSPDSTHLLSASGDKTSKIWDVSVNSVVSTFPMGSTVLDQQLGCLWQKDHLLSVSLSGY
INYLDNRNPSKPLHVIKGHKSIIQCLTVHKNGGKSYIYSGSHDGHINYWDSETGENDSFAGKGHTNQVSRMTVDE
SGQLISCSMDDTVRYTSLMLRDYSGQGVVKLDVQPKCVAVGPGGYAVVVCIGQIVLLKDQRKCFSIDNPGYEPEV
VAVHPGGDTVAIGGVDGNVRLYSILGTTLKDEGKILLEAKGPVTDVAYSHDGAFLAVCDASKVVTVFSVADGYSEN
NVFYGHHEK

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FIGURE 1423

ATTTTAGCTGTTGGTTCGCGCCGACCCGTGTGGGCTGTAGTAGCGGAGGGGTGGGGTCTCCAGAGTTAAGTG
GCTGCTCTCGACTGTGCCCATACAGCAGCCAGCTTTCTTCCTTAATAACTGCCCGTTCGAAGAGTGCAGGATGT
CCAAGCGGCACCGGTTGGACCTAGGGGAGGATTACCCCTCTGGCAAGAAGCGTGGGGACCGATGGGAAGGATC
GAGATCGAGACCGGGATCGTGAAGATCGGCTCTAAAGATCGAGACCAGAACGTGATAGAGGATAGAGAGCGGAG
AGAGGGAGAAAGAAAAGGAGAAGGAGTTGCGAGCTTCAACAAATGCTATGCTTATCAGTGCTGGATTACCACTT
TGAAAGCTTCCCATTCAGCTCACTCAACCCACTCGACACATTCACGCATTCAACACATTTCTGCTCATTCACGC
ATGCCGAGCATGCAGGTTCACACGTCACCTTCCACAGTGCATTAAATCCGGTTCACCAACTTACCCCATCTCTCGAT
ACTATGATATTCTAAAGAAACGCTCTTCAGCTCCCTGTTTGGGAATACAAGGATAGGTTTACAGATATTCTGGTTA
GACATCAGTCCCTTTGACTGGTGGTGAGACTGGGTCTGGTAAACAACACAGATTCCACAGTGGTGTGTGGAGT
ACATGCGATCATTACAGGACCCCAAGAGAGGAGTTGCCGTGATCCCAACCCAGGAGAGTGGCTGCAATGAGTGTGG
CTCAGAGAGTTGCTGATGAGATGGATGTGATGTTGGGCCAGGAAGTTGGTTACTCCATTTCGATTTGAAGACTGCA
GTAGTGCAAAAACCATTTCTAAGTATATGACTGATGGGATGTTACTTCGTGAAGCTATGAATGATCCCCCTCTGG
AGCGTTATGGTGTAAATAATTCTTGATGAGGCTCATGAGAGGACACTGGCTACAGATATTCTAATGGGTGTTCTGA
AGGAAGTTGTAAGACAGAGATCAGATTTAAAGGTTATAGTTATGAGCGCTACTCTAGATGCAGGAAAATTCAGAG
TTTACTTTGATAACTGTCCTCTCCTTAACATATTCTGGGCGTACACATTCCTGTTGAGATCTTCTATCTCCAGAAC
CAGAGAGAGATTACTTGAAGCAGCAATTCGAACAGTTATCCAGATTCTATGTGTAAGAGGAAGAGGGAGATC
TTCCTCTTTCTTAACCTGGTCAAGAGGAAATGATGAAGCCTGTAAAGAAATAAAGCGTGAAGTTGATGATTTGG
GCCCTGAAGTTGGTGACATTAATAATCATTCCATTGTATCTACACTTCCACTCAGCAGCAGCAACGATTTTGG
AGCCTCCACCTCCCAAAAAACAGAAATGGAGCAATTGGAAGAAAGGTAGTTGTGTCACTAACATAGCAGAGACGT
CTTTGACAAATGATGGTGTGGTGTGTTGTTGATTGATCCTGGATTTGCGAAACAGAGAGGTCTACAATCCTCGAATCA
GAGTTGAGTCCCTTTTGGTGACAGCTATTAGTAAAGCTTCAGCTCAGCAAAAGGCGTGGTCGAGCTGGACGTACCA
GACCTGGAAAATGCTTCAGACTTTACACAGAGAAAGCTTATAAAACAGAAATGCAAGGATAACACCTATCCTGAGA
TTTTGCGTCTTAATTAGGATCAGTTGTGTTACAATTGAAGAAATCTGGTATTGATGACTTGGTACATTTTGATT
TTATGGATCCACCAGCTCCTGAAACTCTGATGAGAGCCCTGGAACCTTTGAATTACCTGGCTGCTTTAAATGATG
ATGGAGATCTGACTGAATGGGATCCATGATGGCGAGAGTTTCCCTCTAGATCCACAGCTCGCAAAAATGGTTATTG
CAAGTTGTGACTACAACTGTTCTAATGAGGTCCTATCTATTACTGCTATGTTGTGAGTCCCAAGTGGTTTGTTC
GCCCCAGGAGGCCAAGAAAGCCGCGAGATGAGGCCAAGATGAGATTTGCCACATAGATGGAGATCATCTGACAC
TGCTGAACGTCTACCATGCTTTTAAACAAAATCATGAATCGGTTCAAGTGGTGTATGACAACTTCATTAACTACA
GGTCCCTGATGTCGCGACAGAAATGATACGCCAGCAGCTATCTCGAATTATGGACAGATTTAAATTTGCCCTGTCGAA
GTACTGACTTTTACAAGCAGGAGCATTTATATTAAATAAGAAAAGCTTTGGTTACTGGGATTTTATCGAGGTGG
CACATTTAGAACGAACAGGCGATTACTTAAGTGTGAAAGATAACCGGTGGTCTCAGTTGCTACTGCTTACTGTTCT
TTGACCAACAACTCGAATGGGTGCTTTATAATGAGTTTGTCTTAACAACAAGAAATTACATCCGACATGTACAG
ATATCAAGCGGAAGTGGTGGTGAATAATGCCCTCAATATTATGACATGAGCAATTTCCCAAGTGTGAAGCAA
AGAGAGAGTTGAGCCGATCAATGGCCAACTTCAATCAAGGAATATTCACAGTGAATTCAGTGCATTAGAAC
TGAAGTTATTGAGAGGACAGCTTTAAAGATGAATGAATCAAAAGTTCGATGTGCTCTTCAGCTTGGTTCGA
TAATGGCCCTTTATTGAAGCTTTTAAATTTTCTTACAGTAAATATCCATCTCGATTTTCAATAAATAACAT
TTATGCTCCCTTTTGTGTTGACACTGTAGCTCATACTGAAAAGTCGATCAATGTTTTCAGTTTATTGAAAGT
AGTTCTATATAACAATGTTATAAGCATTTCTTTAGAAATGGTTGAAAATGCTTCTAAATGTGATTATCGACC
ATGGTATGATGATCGTTGTAAATGTTGACATTCCTTTTGAAGTGTGAAATGTTTCAACTGTTGCTTATGTAG
ACACAATCTTCGTCTCAGTACAGGACACTGACTTCAATAAAGTCTATTATATACT

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FIGURE 1424A

AGGATTTTAAGAGTGGACCTTGGTATTACCATAAATTCCTATGAATGTAGCAAAATGTAAAGCAAGTGGACCGAACTG
TGAACAATCTTTTGAATAATCACTCCCTACAGGAGTTTCAGCTTTACAGCCGAGACTGAAAAGGAGAAACAAG
ACTGGATTGAAGCTGTGACGCAATCAATAGCAGAAACTCTCTCTGATTAGAAGTAGCTGAGAGATTGGTTTCA
ATGAATCCAAAGAGAGCTGTGCAGATTGTAAAGCCCCAGATCTCTGACTGGGCATCCATCAATCTCTGTGTGTGCA
TCTGTAAAGAGTGTGACAGGACAGCATAGATCTTTAGGACCAAAAGATTCCAAGGTTAGAAGCTTAAAAATGGATG
CTAGCATTTGGAGCAATGAACCTCTCAGACTTTTATTGTTCATTGGAAACAAAAGAGCAAAATGACTTTTGGGCTG
GTAATCTTCAAAGGATGAAGAAATACATATGGACTCACCAGTAGAAAAAGAGAAAAAACTTTATTACTCAGAAAT
ATAAAGAAAGAAAAATTCAGAAAAACTCTTTTGGCATCTCTACCCAAAAGAAATATAAGGCTCTATGTGCTG
CTGTAGTGAACCGGATGTTCTAGAAAACAATGGCTTTGCTGTTCACTGGAGCAGATGTCTATGTGTGCCACCGGAG
ACCCCGTGCTAGACCCCTTATCTGCTAGCCAAGAAAGCTGGGCAAGTCTGCAAAATGGAATTTCTCTACCATA
ACAAATTCAGATTTCCTCAACATGATATTCATTCCGAGGGTGATTAAAGTCAAGAGCTTCCCAAGTCCACAT
TCCTCTGTGACTTTTATATCAAGCTCCTTCGTCTGTTCTAAACTCTCTCAGAGAAAAAAGTCTTGAAGAGA
CAATATAAAAAATGGTGTGTTTGGAAAGGAGGCTTCTTGAGTTACTATGAAATGATAAGTCTACCACACCTTAATG
GCACCATTAATATCAATGAAGTTATCTGCCCTGGCTATACAAAAGAGGACTTCTATTAAATACTGGGCCATCT
TTATCTTTGAGATCTACTTACCCTCCGAACGTGTGTTTTATTGGAGCTGAAACATCTCAAGCTCAAAGAAAAAT
GGACAGAGGCAATAGCCAAAGCATTTTGTCCCTTATTGCTGAAACTTAAACAGAGCTGACTATGATTGATTG
GTCAACTCTTCTACAAAGACTGCCATGCCCTGGACTAGTGGAGAAAGGCTGGTTTGTCTATGGACAAATCCAGCT
TGCAATTTTGGCTTCAAATGCAAGAAAGTTCAGGAGATAGAATGCACTTAAGAAGCTGCAAGACTTAAACATCA
GCACAATGGTTCAAAATGGGAAAAAAGTGGAGTGTCTTACTCTTTGGTAGAAAAAGGGAGAACATTATACATCCATG
GGCATACCAAGTGGATTTCACAGCTTGGCATACTGCAATTGAAAAAGCAGCAGGTACAGATGGTAATGCTTTAC
AAGATCAGCAGCTCAGCAAAATGACGTTCCTCATATAGTGAACAGCTGTATAGCATTTGTTCACACAGATGGTT
TAGGATGCAAAATATATCTATCAAAAGAAATGGTGATCCTTTGCATATAAGTGAACCTCTGGAGAGTTTCAAAGAG
ATGCAAGAAGCTTTAAATTTAGGGGCTGGAAAAACATCAGCTTGAAGATGTGACGGCTGTGTTGAAAAGTTTCTCT
CTGACATTTGATGTGCACTGTCTTACTAAGGAGCTTACCCTATTTGGATCTCTGCTTTAGATACGCAAGATGACA
AGGAAAGAAATATAAAATATGGAGCATTATACGTTCTCTCCAGGGGTCAACCGAGCAACACTAGCAGCTATCA
TTGAACACCTGTATAGGGTTTCAGAAATGCTCAGAAATCAATCAGATGAATGCCCAATTTGGCCCTTGGCTCTTT
CATCTCTGTTTGTTCACACGAAGGGACAACACTAGTGAAGAGTGAATGTAATTGAGGACCTTAATTAATATATG
TAGAAATATTGGAGTTAAAGAGATCAAGTCAAAACAAATGGACATAGAAAAATAGCTTTATTACCAAGTGAAG
ACCCCAAGTTTCCCAAGCTGGAGATTGTTAAATTGAAGTATATGTAGAAAGGAAGAACCCGACTGTAGTATTA
TAATTCGGATATCTCCTGTGTAGGAAGCAGAAAGAAATTAACATATGATATATAGGCATAAAAAATATTATTCCTA
CAAAAGGTGATATTTGGGCCACATTTGAAGTCATTGAAAAATGAAGAGCTAGAGCGCTCTCTCTACTACAGAGAAA
ATGTACTGGAGCAGGTGCTTCGGTGGAGTTTATTAGCTGAACCTTGCTCTGCTTACCTGGTGGTGAAGAGATTCT
TAACCGCTGACACATTAACACTCGAGTGACCGGAGTACACTGGGAAGCATCAAAAGGAAGTCTTGAANAATCA
AAGAGAACCATTCAAAATAC TACTTGGAAATAGTTTCAAGACCGGTATTTGTTTACAGAGATGGGTTTCTCT
TTCTTTTCAAGGATGTGAAGATGTATGAACATGACAAGATGTTTCTCTAGTTTCCATGAAGTTTATCGTGGAG
TGAAGAGAAAATGAAGCTTCAACCAAGCTTGGGATGACCGCATATCTCAGTAACATCTGAGTGGCTGTGTT
GTGATAGTTCAGAACTCAGACGGAGTGGATGACCAATATCTTTATGCCAGCATGAATATGATATATGGCCAC
CAGCTGGAAAGGAACGAAACGGTCTCAATACCAAAAATCCCAAAATTTGGAGTTTGGCTTCTGATTCCTATACAG
ATAGGAGGATGCAACCTTGGCCGGAAAAATATAGAGGTGCAAGAGCAGCAACTGAAAGGCTTGAAGGCTGACGT
AAAGTGTGATAAAGAGTCCGTGGACTCTAGCTTAAAGAGAGAGCTTCCATGGTGGCCCACTGCTGGAGCACA
AGGACGATAAACTTCGAAATCGACCCGAAAAACATCGAGTTTCAACTGCTGGAGGACACAGAGCTGAAGCC
CACTTGGGCAACCAAGAGGCTATAAAGGCTTAAAGCACTTAGGAAGACTGAGGACAGGAATAGCAAGCTACTT
TGAGCTGTGATCATAAGTTACCATCAAGGGTAATTGAAGAATTAATGTGGTCTTACACAGGCTCAAGACCCCTC
CAAAAGAAATTACAGGATGAGCAATTTTGAAGTAGAAATAAAATGAATTGCTCCCAAGATTATTTTAAATAT
TGATGCAATCTTTATGTGTAACCTCAAACCTGAACATAAGATAATTCATAAGAAATTTGGCTATGATAGGCA
ATTTGTCTATGCTTAGGCATTTAAGGAGCATTTAAAAATATGATATATGTGACTGAAGTAAAGTAACTTAT
TTTGGCTGAAACAACTTGAAGGTTCCATTTGATTAACGTGTGTAAGAAGCAATTTGGGTTACTTAGTGGTCA
GTCCTTTTAAAGTAGTTGCTGTTAAGTGGTATAATTTATGAGCAGAAATCTCAACCTGACTGTATGATAAA

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FIGURE 1424B

ATGCTGTGTTTAAATGAAGCCTAAGAACTATCTGTACATATTTTGCACITTGAGAAACCTTGTATATTAAAT
ACCATATGTTTTTAGGTTTACAGAAGTTCTACCTTAGGGAAAAGAAAGGGAAGTAAATTTGAAAAAGGGGGAGAA
TTTTATTGTAGTGGCTGCCTAAAAACCACTGGAGTTTTTAAAGAAAGCAAGGAGTTAAATGTCTCGAAAAACAAG
AAGTGAGCTAAGATTCTATTCTAGTTCCTAATGACCAGAACTTGTCAATGAGAAACCACTTGTAAAGAAAAAGTC
CAGTGTATTATTCTCAAGAGTAATATTGGCCCAACAGATGTAAATAATAGCACTAGCCACTCTTATTAATATTTA
TAGTGTTAGAAAACCAAGCCACATTACAGATTCACTACGTTTGGCTCATTGTTGGTGGCTGCTAAGAGGAACTT
ACACTGCATTGGAGAGGTTGTGTACAGGACCTGGCCTGGATGCTGATTGCACTGTCAITGTATGCAAGCATT
TGTCTTTTTTCAGAAATTTCTGACTATACTTTTGGTACGAACAAAATTATCACCACAGGGTCTGTTGTTTTGTT
TGATTTTATGATTTTTTAAATATATTAAAGTTGTAAATGTTTTCTCCGAGTTGTCAGAAATAACTGGAAGAA
TACAATATATGGCCATTATGGAGCCAGGGGCTAGTTGGTGGTTTACTATACATTTGGGGCTACCTGGTCACATT
TAATCTAGGTTTTTTTTCTTTTTTAAGTAAAGGTGGTCTCTCCCTGTACTTATGAATAAGGACAAAGCCC
TATTTTTGTTTCCACATAAAGATCAGCTACTGAATTGGTGAATTTCTGACAGACAATGCTATCTAACCATAGTT
CATGTTAGGGGAAGCATTITTCATCAGTTTCTTTTAAATTTGGATTGTCTGGTGAGTTTGATATTAAACATTAT
GTAGCTAAGTTTTTTTTTTTAGCATTCTTTTTTATTTTTCAATCTATATTACAGGCCCATACTTCAGTCAGT
CCAAATCATAGTACAGTGATGTGGTGGTAGATGCTATGAATTTCTTCATTGTAAATACGGATCATTGTATTTTG
GGGTGATAAAATAGTTCACCATGGGTATGAGATATTTATCTTTAAATCAAAGTAAATTAGAATTTTTAAAAAGC
ACAAAACGTCAGGACAGTTTATGAAATAGGTGGCACTATTAGGGAATCTTCCTTAAAGCAAGAAATCATGTTAT
TTAGAAAGAAAACTAATCTTAAACATACTATTCTAATAAATATTTATATTTTATGAAATAAGAGGTTATGTG
GAAATTAATATTTGGTGATGTTGGACAGTGGAAAAGTATCTAGAGTTTTTACCTGCCCTTATCTGAATTTCTCTTG
AAACTTGAGCTTAAACTCTAATAGCTGTTTCCCTTTCTATTCTGAACAACGTCTCCATTTTTCAAGTGTGAGAG
ATAAGGCTAATGATGACATCTCATTTATTTTGAGTAAACATTAAATTTGTTTACAAGTCTACTTG

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FIGURE 1425

TTCTTTCTTTGCTGCGTCTACTGCGAGAATGGAAGACTATTCTCAGCAATCAGACTGTCGACATTCAGAAAAATGT
CGACATTACTCTGAAGGGACGCACAGTTATCGTGAAGGGCCCCAGAGGAACCTCGCGAGGGACTTCAATCACAT
CAATGTAGAACTCAGCCTTCTTGGAAGAAAAAAGAGGCTCCGGGTGACAAATGGTGGGGTAACAGAAAGGA
ACTGGCTACCGTTCGGACTATTGTAGTCATGTACAGAACATGATCAAGGGTGTACACTGGGCTCCCGTTACAA
GATGAGGCTCTGTGATGCTCACTTCCCCATCAACGTTGTTATCCAGGAGAAATGGGTCTCTTGTGAAATCCGAAA
TTTCTTGGGTGAAAAATACATCCGAGGGTTCGGATGAGACCAGGTGTGCTTGTTTCAGTATCTCAAGCCAGAA
AGATGAATTAATCCTTGAAGGAAATGACATTGAGCTTGTTCAAATTCAGCGGCTTTGATTACAGCAAGCCACAAC
AGTTAAAAACAAGGATATCAGGAAATTTTGGATGGTATCTATGTCTCTGAAAAAGGAAGTGTTCAGCAGGCTGA
TGAATTAAGATCTAAGAGTTACCTGGCTACAGAAAGAAGATGCCAGATGACACTTAAGACCTACTTGTGATATTTA
AATGATGCAATAAAGACCTATTGATTGGACCTTCTCTT

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FIGURE 1426

MKTILSNQTVDIPENVDTILKGRIVIVKGPRGTLRRDFNHINVELSLLGKKKKRLRVDKWWGNRKELATVRTICS
HVQNMIGVTLGFRYKMRSVYAHFFINVVIIQENGSLVEIRNFLGKEYIRRVVMRPGVACSVSQAQKDELILEGND
IELVSNAAALIQQATTVKNKDIRKFLDGIYVSEKGVQQADE

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FIGURE 1427A

GTCTTGTCTTCTTTTTTTCATTGATGTAATTTTTTAACTTAATATGAAACTCTCCAAGTCTTGATCATCAGCC
AGGATTTTGGCCACGCAATTTTCATTCTCTTATCGGAGCTTGATGTGTCAAAAGTATACTTCAGAGTGCACAACTT
AAGCAAGTAATATATTTTACCTACAGATACTTATGAAGACATTTCTCCGCTACGTCGAGTAAAGATATATAAAGC
TGTTTTCTAACTGAAATGCTTGAATAAGCCTGTAATAGAAATATTTTTTCATTTTTTAAAGAAAGGGCGGAATTC
CCAGACTGTCTTCCGCTCTTTGCACTTCGCGGGAGAAGTTGTTGGCGGAATGGATCTGAGCCTCGATAACAGA
TTCTCTCAACCGCCGCCACCCCGCAGCCAGCCAGCGCCTCTGCTGGGGCTGCGATCGACATTCGGAATTTCTTTG
GAGTAATACCAAGTGGAAAGAACTTGTAAGTGAACAGTAAAGAAATGAGAAAACAAAGTCTGATGAGAGAA
CTTTAAAGCAAGAAAGGAATTAAGGAAATCAAGGTAAATAGCTCCCGTAAAGAGGATGACTTCAACAAAGAGC
AACCAAGCAAGAAAAGAGGATCATCTATGATTGATTCAGAGTCAGAGTCAAGAGGAGAGCTTGCAGGTAAAAATGCCA
AAAAGCCACCAAGAAAACCTGCCAGTATCTTCTAAACCTGGTAAAAATTCACGGCAGGATCTGTTACATACATT
CAGAAAACAGATGAAGAATGAGCTTTATGTGTAAGAAGCGCGCCTCTAAATCAAAAGAGAAATGGAAGATCTACAA
ATAGTCATCTTGGAAATCAAACTAGAAAAGAAATGAAGAAAACATAAGCAAGAAATAAGCCTTTATACCCAA
TAAAACTTACACCCACATCAGTACTTGATTATTTTGGAACTGGAAGTCCAAAGATCTAAATAAGAGATGTTGG
CAAGCAAAAAGAAAAGAGCTTTCACAAAATACAGATGAGTCTGGATTAAATGATGAAGCCATGCCCAAGCAATTAC
AGCTTGATGAAGATGCGGAGCTGGAGAGGCGAGTTGCATGAAGATGAAGAGTTTGCCAGAACATTAGCCATGTTGG
ATGAAGAACCCAGAGCCAAAAGGCTCGAAAGGACACAGAGCGGGAGAAACGTTTTTCATCTGTCCAAAGCCAAAT
TAAGTAAAGCAGAAAACATAAATATCCTCATAAAGTAAACAGCACAAAGTTTCAGATGAAAGAAAGAGCTACAC
GTCTTAGAAGCAAGTAAATATGAAGTTCAAAAGTAATCTCAGCAACATTTCCAAGTCTCAGAGCTGACAAATAG
GAGAAGTCTCTTCTCCCAAGGCCAGTTCTAAGCTGGCAATTTATGAAAAGAAAAGAGAGCTCTTATAAGAAA
TAGAGCTTGTGGCCTCAAAAGGAAAAGAAATGCCATTAATTTGAAAGGAGAGACAAAACCTCTTAAGAAAACCA
AAAGTTCTTCAGCTGAAAAGAGCTTGTAAGTCTGGAATTTCTGAAGATTTCTGAAGAGAAACGCATTAATTTCAAGCTTATC
GAAGCTACTTAAATCGAAGAGTCCCAAGGCTCTGGGCTCAAAAGAAATACCAAGAGGAGCTGAAAATTTGCTTGG
AAGGCCCTTATATTTGTAATCACAGGCGTGTGCGAGTCTATTGAACGAGATGAGGCCAAGTCTCTAATTGAACGTT
ATGGGGGAAAAGTAACAGGAAATGTCAGCAAGAAAACAAATTTATCTTGTGTCATGGGTGCGTGATAGTGGACAGTCCA
AGAGTGATAAGGCCGCCAGCCTTGGGGACAAAAATTTATGATGAAGATGGCCTGTTGAATCTGATTGGGACTATGCG
CAGCAAGAAATCCAAGTATGAATAGCAGTTGAAACTGAGATGAAGAAAGAGTCCAACTGGAGAGAAACACCCC
AAAAAATGTCCAAGGAAAAAGAAAATTAGTCCATCTAAAAAGGAATCAGAAATCTAAAAAGAGCAGGCCGACTT
CCAAAGGGGACAGTTTGGCAAGGACAATAAAAAAGGAACAGATGTGTTTTGAAAAGGCTGGATTCAAGGAGC
AGGTGGCTGAGGAGACAAGTGTGACAGCAAGCTAGGAATTTGGCTGATGACGAGTGAAGAAAACAAAGTGGAAA
ATTTGCTCTGGGTGGATAAATATAGCAACCTCTGCTCAAGACCATAATTTGGACAGCAAGGTGACGACAGCTGTG
CCAAACAACTCTACGCTGCTCGGACCTGCGCAAACTGGCAAAAGAGTCTTCCGAGATGAAAAGAACGACGACGAAGTTT
GTAAATTTTCCGGCAAAAGATGATGGCTCTAGTTTTTAAAGAGCGTTGCTGTGACGGCCTCCTGGTGTGGCAAAA
CCACCACAGCTTCCCTGGTGTGTCAGGAGTTGGGATACAGCTACGTGGAACCTGAATGCAAGTGACACCCGGAGTA
AGAGCGATTTGAAGCGATTTGTGCTGAGTCACTGAACATACAGCATCAAAAGGCTTTTATTAATGAAGCAG
CCTCTCAGTAAGCACGAACATGCTCTCATCATGGATGAAGTAGATGGCATGGCAGGCAATGAGGATAGGGGAG
GAATTCAGGAATTAATTTGGCCTGATAAACAATCTAAAAATTTCCATTATTTGATGTGCAATGATGAAGAAATCATC
CAAGATTGCTCTCTGGTTCATTATTTGTTTTGATCTTCTGTTTTCAAGACCTCGGGTTGAACAGATTAAAGGGTG
CTATGATGTCATATGCATTAAAGAAAGTTTAAAGATTCCCTCCAGCTATGAATGAATAATTTTGGGAGCCA
ATCAAGATATCAGACATTTTACATAATCTGAGTATGGGTGTCAGCAAGATAAGACCTTAACCTATGACAGG
CCAAAGCTGATTCTCAGAGGCCAAAAGGATATCAAAATGGGCCCATTTGATGTTGCCCGGAAAGTGTGTCAG
CTGGAGGGAGACTGCTCAGATGTCACCTTGTGGACAAGTCAGATCTCTTTTTTCATGATTATCAATGAACCC
TCTTCTGTCAGGAAAATATCATACAGCTGAAGCCTGTAGCAGAGGGGGTGACATGAAAAGACCTGATGCTTT
TAAGCAGAGCAGCAGACGATATGCGATGGTGACCTAGTGGACAGCCAGATCCGGAGTAAACAACTGGAGTC
TCTGCTGCGCAGGCCATTTATGCGAGTGTCTTCTGGAGAGTTGATGAGGGGGTACATGACCCAGTTTCCCA
CCTTCCCAAGCTGGCTGGGGAAGCACTCGTCTACAGGCAACATGATCGTATTGTTGACAGCACTGGCCTGCTATC
TGAGTCTCAGAATTTACTCAGCAAAAAGGACTGTAACATGGATTATCTGTCGCTTCTAAGGGATGCACTTGATC
AGCCCTTGACCTCAAGAGGATGACGGAGTACAGGATGTTGTTGCAATTTGGACACATATTTTGTATGAAG
AAGACTTTGAGAAATATCATGGAATCAGCAGCTGGGTGGCAACCTAGTCCCTTTTCAAGCTGGATCCCAAGG

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FIGURE 1427B

TGAAAGCAGCCTTCACAAGAGCTTACAATAAGGAAGCCCACCTTACTCCATACTCACTTCAAGCTATAAAGGCAT
CTAGACACAGCACAGCCCATCCCTGGATTCCGGAATACAATGAAGAATTAATGAAGATGACTCTCAATCTGATG
AGAAAAGACCAAGATGCTATAGAACTGATGCCATGATCAAGAAAAAGACAAAATCTTCAAAGCCTTCAAAACCAG
AAAAAGATAAAGGAGCCAGAAAAAGGAAAAAGTTCGAAGAAATGAAACCATTTTCACTAGCGACAGCCA
CTTTTACTCTCCCTCCTGACCAGTCCAGCTGGTCTAGAGAAAGCCTTGTTTTTCCCAGAGCAACCATTGTTTTA
GCATAATGGGATGACCTGGTGTGCCATTATAAATAAAGGGTGGTATGGCTAGAAGGGTATGAGCAGTAGGCTTAT
GTACACCTCTTATAGAGGTGATAGGACTGCTTGGGTCTCCACTGTCTCTGTCAATCTAGTTAGACGTGCTTC
TGAATGACTGTAGAATTGGAAGTACAACTACACCTGGGCTTTGGAGTCAGATTTAGTTAACAAATAATGAGCCT
GGAGCAGTAGTACTAAGGCGCTCTTTGTAGGCTTAAGAATTTATCCTAATGGCCTTTATAGGACCAATGCTGATT
TTTTTTAAAGGCAGTTCCTATTATGTGGTGAAATTTGTAAATAAATGATTATACAAAACAGTCACCACCTAGAA
CTGGGTATTCTTTGTACATTGTGAGATATCTTCAAAGTATAAATTAGGAATAAAATGTTCCACATGATATGTG
TACAAATCTTTTTAAGATTGTCATCTTTGACAGCAAAATATTATGTTGGTATATTACTTCTTATTAATTTGCA
AATGATTGGATTAATAAAGCTCACTGTATTCTTACTAACCTGTTGTGTGAACATAACATTGGCAGTCGAGGAG
TCAGAAGTCGGATTCCCAGCCTCACTCCCTCTGTGTGTGTGACACGTCCTGCTGTGAATAGGATTTTCATGCA
GTGGTCTGTTATGGGGCTTTGCAGCGTGGGGGGCTGCAGAAGATTCTCAGACATTCTTATCCTCTGGAGTCTCA
ACCCATCAGGTTTCAGACCAAGTAGGAACAGGCTGGGTGAGGCTCTTAATTTCACTACGTTGGGGACAAAATGAA
CACTGGCTTTTGTCACTTTGCCCCCTGAGAGATCTAGTCTGTGCTGTGATGGCTTCCACAAACCTGTTGGAAG
TTTGGGTATTCCATAACTGTATGTGTTGAGTGGCGTGACGTATGGACCTAGCCTGGAATTTAGATGTCTAGC
TATTTTTTAATCTTGTGTGTAATGCTCAGAGGTCTGTGCTACCTCTGTGAGGTATATACTAAAATGAATGTA
ATAAGGATCGTATCCCTGCTTTAAGGAACTGATAGTCTTGTTTGGGTGATGAGACAAAGTTCTTGAGACATTTA
AACTGTATTACCAAGTGTGAAAAATGTCATTATGGAGATTAATTCATTATGGAATAAAACATTGCCTAAGCCC
TTGCCCTGCTG

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FIGURE 1428

MDIRKFFGVIPSGKKLVSETVKKNEKTSDEETLKAKKGIKEIKVNSSRKEDDFKQKQPSKKKRIIYDSSESEE
TLQVKNAKKPPKELPVSSKPGKISRQDPVTYISETDEEDDFMCKKAASKSKENGSTNSHLGTSNMKKNEENTKT
KNKPLSPIKLTPTSVLDYFGTGSVQRSNKKMVASKRKELSQNTDESGLNDEAIAKQLQLEDADAELERQLHEDEEF
ARTLAMLDEEPTKKARKDTEAGETFSVQANLSKAEKHYPHKVKTAVQSDERKSYSPPKQSKYESSKESQQHS
KSSADKIGEVSSPKASSKLAIMKRKEESSYKEIEPVASKRKENAIKLGETKTPKKTSSPAKKESVSPEDSEKK
RTNYQAYRSYLNREGPKALGSKEIPKGAENCLGLELIFVITGVLESIERDEAKSLIERYGGKVTGNVSKKTNLYVM
GRDSGQSKSDKAAALGTKIIDEDGLNLIRTMPGKKSKEYIAVETEMKKEKSLERTPQKNVQGRKRKISPKKES
SKKS RPTS SKRDSLAKTIKKETDVFWKS LDFKEQVAEETS GDSKARNLADDSSENKVENLLWVDKYKPTSLKTIIG
QQGDQSCANKLLRWLRNWQKSSSEDKKHAAKFGKFGSGKDDGSFKAALLSGPPGVGKTTTASLVCQELGYSYVEL
NASDTRSKSSLKAIVAESLNNTSIKGFYSNGAASSVSTKHALIMDEVDMAGNEDRGGIQELIGLIKHTKIPIC
MCNDRNHPKIRSLVHYCFDLRFQRPRVEQIKGAMMSIAFKEGLKIPPPAMNEIILGANQDIRQVLHNLMSWCAKS
KALTYDQAKADSHRAKDKIKMGPFDVARKVFAAGEETAHMSLVDKSDFHFDYSIAPLFVQENYIHKVPVAAGD
MKKHLMLLSRAADSICDGLVDVSIQIRSKQNWSLLPQAIIYASVLPGE LMRGYMTQFFTFPSWLKGHSSTGKHDR
VQDLALHMSLRITYSSKRTVNM DYLSLLRDALVQPLTSQGVGVQDVVALMDTYIYLMKEDFENIMEISSWGKPS
FSKLDPKVKAATRAYNKEAHLTPYSLQAIKASRHS TSPSLDSEYNEELNEDDSQSEKQDDAIETDAMIKKKT
SSKPSKPEKDKPRKGKGSSK

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FIGURE 1429A

ATAGTTCGCGTAGCGGCTCGAGCGTGGAGATGAAGCGTATTTCCTCACTGCTAGAAAAAGACTTGGCTTGGCGCAC
CAATACAGTTTGGCTCGGCAAAAAACATCAGGAACTACCTTGCAGTAACAGGAGCTGATTATATTGTGAAAATCT
TTGATGCCATGGTCAAAAAAGAGTGAATTAACCTTACCTGGTAAGTGTGTGGCCATGGATTGGGATAAAGATG
GAGATGCTCTAGCAGTGATTGCTGAGAAATCTAGCTGCATTATCTTTGGGATGCCAACCAAAATAGACGAGCC
AGTTAGACAATGGCATGAGGGATCAAAATGCTTTCTCTTCTGGTCAAAAGTTGGAAGTTTCTGGCTTGTGGA
CTGTTAAAGGAAATTTGCTATTATAATCATCAGACATCTCGAAGATTCCCTGCTTGGAAAACATACTAAGA
GAATCACTTGTGGATGTTGGAATGCAGAAAACTGCTTGTCTTTAGGTGGTGAAGATAAAATGATTACAGTTAGTA
ATCAGGAAGGTGACACGATAAGACAGACACAAGTGAGATCAGAGCTAGCAACATGCAGTTTTCTTGATGAAGA
TGGATGACCGAACCTCTGCTGCTGAAACCATGATAAGTGTGGTGCTTGGCAAGAAAATTTGTTTTTTTAAATC
TGAATGAACAGATAACCCAGCTGATCTTGAATTTACGACGAGCTTTGGCAACATTGTCTGCTATAATTGGTATG
GTGATGGCCGCATCATGATTGGTTTTTCATGTGGACATTTTGGTGCATTTCTACTCATCTGGAGAGCTTGGTG
AAGAGATATTTAGGCTCGTAACCATAAAGATAATCTAACCCAGCATTCGAGTATCAGAGACTCTTAACAAAAGTG
CTACATGTGGAGATAACTGCATTAAAAATCCAAGACTTGGTTGACTTAAAAAGACATGTATGTTATACTCAACCTGG
ATGAGGAAAAATAAAGGATTGGGTACCTTGTCTGGAGCTGATGATGGCCAGTTGCTAGCACTCTCTACCCAAAAGG
GCTCACTTCACTGTTTTCTGACCAAGCTTCCCATACTTGGGGATGCCTGACAGCAAGGATTGCCTATCTCACCT
CCCTCTTGAAGTACCCGTAGCCAACTGTTGAAGGAGAGCTACCAATCACAGTTTCTGTTGATGTGGAAGCCCA
ACTTTGTGGCAGTAGGTCTTTATCATCTGGCTGTAGGAATGAATAATCGAGCTTGGTTTTATGTCCTTGGAGAAA
ATGCTGTGAAAAAATTGAAAGATATGGAGTATCTGGGAACAGTAGCCAGTATTTCGCTCATCTGACTTACTGCTG
CTGCACTTTTGAAGGCAGAAAGTCCAGTTACATTTGATAGAAAGCGAAATCTTGGATGCTCAAGAAGAACGCTGAGA
CTCGGCTTTCCCGAGCTGGATGATAAGTGGCGCTATCTTATGCCATGCCTTAAC TAGTGATTTCCTCATCTATG
GTACAGATACGTGGTGTGCTTCAGTATTTCTACATTGAAGACTGGCAATTCGTTAGTTATTCAGCATCTCTGCA
GTGTGAAAAAGATTTTTCCGACCCAAATGGGACCAGATTAGTTTTTCATGATGAAAAAGTGATGGATTGTTTT
ACTGTCCAGTCAATGACGCTACCTATGAGATTCAGATTTTTCCACCAACCATTAAGGTGTTCTTTGGGAAAATC
GGCAATGGATAAAGGTGATTTATTTGCTTATGATGATGAAGGTGACACTTATGTCTTTACAGAGGACACTA
TACAAGGAGGCCAAGGTATTTTGGCTGGTAGCACCAGAAAGTTCCCTTTTGTCTATAAACCTTTGCTGCTATATAATG
GAGAGCTGACCTGCCAAAACAGAGTGGAAAAGTAAACAACATCTACCTTAGCACCCATGGCTTTCTCAGCAACT
TAAAAAGATACGGGGCTGACGAACTGAGACCAATGCTGGCACAAGATTTAATGCTAAAGAGGTTTCTGATGCTT
GGGAAATGTGCAGATTTCTGAATGATGAGGCTGCCTGGAATGAGTTGGCCAGAGCTTGTCTACATACATGGAAG
TGGAGTTTGCAATCCGTGTTTTATCGGAGAAATGGAAATGTTGGCATAGTGATGCTTGGAAACAAATAAAGGGAA
TAGAGGACTACAACATTTTGGCAGGACACCTTGCCATGTTTACCAACGATTATAACCTGGCTCAGGACTGTGACC
TTGCATCCAGCTGTCTTATGCTGCCCTGGAGATGAGAAGGATTTACAGACTTGGGACAGTGTCTACAACCTGG
CAAAAGCATTTGGCCCCAGCAGATACCTTTTATATCAAAAGAATATGCTATTACGCTTGAATTCGGGGTGATT
ATGTAATGCTTTGGCTCATTAATGAGAAAAGGAATACAGGTGATAATAAGGAACATGATGAAGCTTGTCTGGCTG
GAGTGGCCAGAGTCCATAAGATGGGAGACATACGCTCAGGGGTTAACCAAGCCCTCAAGCATCCGAGAGGG
TCCTTAAAAAGAGACTGTGGAGCCATATGTGAGAATATGAAGCAATTTTCAAGAGCCGCCAACCTGTATGAAAAAG
GTCTCTACTACGATAAAGCAGCATCTGTTTACATCCGCTCTAAGAATTGGGCAAAAGTTGTGTGATCTTCTGCCCC
ACGTTTTTCTCCTAAGAGTATTTTGGAGTATGCCAAAGCCAAGGAAGCAGATGGAAGATACAAGAAAGCTGTG
TAGCTTATGAAATGCAAAACAGGTGGCAAGGTGTAATCCGCATCTATCTGGATCAGCTCAATATCTCTGAAAAAG
CGTGTCAATATGTTAGAGAGACCCAGTCTCTGGATGGAGCAAAAATGGTAGCCAGGATTGTTTACAGCTTGGTG
ACTATGGGTCTGCCATCCAGTTTCTGTGTCATGTCCAAATGCAACAATGAAGCTTTCACACTGGCTCAGCAACACA
ACAAAATGGAATCTATGCAGATATTATTGGTTCTGAAGACACTACTATGAAGACTATCAAGCACTATCGCTTAT
ACTTTGAAGGAGAAAAGAGATATCTTCAGGCTGGAAAAATCTTCTTGTGTGTGGCCAAATATTCACGAGCACTTA
AACACTTCTGAAATGCCCAAGCTCGGAAGATAATGTGGCAATAGAAAATGGAATGGAACCTGTTGGTCAGGCCA
AAGATGAACCTGCTGACCACATCAGCTGTATGACCACTCTCTGGGGGAGAACAGATGGCATGCTTAAGGATGCCAAT
ACCTGTTCCGCTTGTACATGGCTCTGAAGCAATACCGAGAAGCTGCCAGACTGCACATCATGTTGCCAGAGAAG
AGCAGCTTCGAGGCACTACCGGAATGCACAGATGTTCTCTTCAGTATGATGAGCACTGAAATCCCAAGAA
TCAAAATCCCTCCGAGTGGGCAACCACTCATGATTCTGCACAGCTATATACTAGTAAAGTTTCATGTTAA
ATGGAGATCACATGAAAGGGGCTCGCATGCTCATTCGGGTGGCAACAACATCAGCAAAATTCATCACACATTG

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FIGURE 1429B

TACCCATCCTGACGCTCAACTGTGATTGAGTGTACAGGGCAGGCCTGAAGAAGCTCTGCTTTCAGCTTCGCAGCTA
TGTTGATGAGGCCTGAATACCGCAGCAAAATAGATGCCAAATACAAAAGAAGATCGAGGGAATGGTCAGGAGAC
CCGATATATCTGAGATAGAAGAGGCCACGACTCCATGTCCATTCTGCAAATTTCTTCTCCAGAGTGTGAACTCC
TCTGTCTGGATGTAAAAACAGTATCCCATATTGCATTGCAACAGGTGCGACACATGTTGAAAGATGACTGGACGG
TGTGTCCACATTGTGACTTCCCTGCTCTATACTCAGAATTGAAGATCATGCTAAACACTGAAAGCACATGTCTTA
TGTGTTCAGAAAAGATTAAACGCTGCTCAGCTGAAAAAGATTTAGACTGTACCCAGTACCTGCGAACGGAGGAGG
AACTGTGATTGGCACGTGCAGATACAATGCTCCTGAGAAGACAGCATTTCCACAGGAGGCTGTTTCTCCCTTG
GTGGATTTAAGACACGGTCCTTTCTGGATACAGAGAAATGAAACAACGGTGACCTCTCCAGGTGCGCACTTTCCA
CTTCTGTACGGTGGCAAAACGATGACATGAACCTTGCTGTTTATTGTACTTTGTATATTATTCTCTTCAAAG
TCTTTCTTACACACTCTATCCTCTGCACTGTTAATAGTAACCTATGACATAATTGTAATATTACAGCTTTTGTCT
AACTTTTGTATTTTGAAAACTTTAAAAATAAAATTGTTGACTAG

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FIGURE 1430

GGCACGAGGCCTGGCGGCTCCGCTAGCTGTTTTCTGCTTCCCTAGGCTATTCTGCCGGGCGCTCCGCGAAGA
TGCAGCTCAAGCCGATGGAATCAACCCCGAGATGCTGAACAAAGTGCTGTCCGGCTGGGGGTCCGGGCCAGT
GGCGCTTCGTGGACGTGCTGGGCTGGAAGAGGAGTCTCTGGGCTCGGTGCCAGCGCTGCCTGCGCGCTGCTGC
TGCTGTTCCCTCAGGCCCAGCATGAGAAGTTCAGGAAAAAGCAGATTGAAGAGCTGAAGGGACAAGAGTTA
GTCCTAAAGTGATCTCATGAAGCAGACCATGGGAATTCCTGTGGCACAATCGGACTTATTCACGCAGTGGCCA
ATAATCAAGACAACTGGGATTTGAGGATGGATCAGTTCTGAAAAGTTCTTTCTGAAACAGAGAAATGTCCC
CTGAAGACAGAGCAAAATGCTTTGAAAAGAATGAGGCCATACAGGCAGCCCATGATGCCGTGGCAGGAAGGCC
AATGTCGGGTAGATGACAAGTGAAATTTCCATTTTATTCTGTTTAAACACGTGGATGGCCACCTCTATGAAGTTG
ATGGACGAATGCCTTTTCCGGTGAACCATGGCGCCAGTTCAGAGGACACCTGTCTGAAGGACGCTGCCAAGGTCT
GCAGAGAATTCACCGAGCGTGAGCAAGGAGAAGTCCGCTTCTCTGCCGTGGCTCTCTGCAAGGCAGCCTTAATGTCT
CTGTGGGAGGGACTTTGCTGATTTCCCTCTTCCCTTCAACATGAAAAATATATACCCCCCATGCAGTCTAAAT
GCTTCAGTACTTGTGAACACAGCTGTTCTCTGTTCTGCAGACACGCCTTCCCTCAGCCACACCCAGGCACTT
AAGCACAAGCAGATGCACAGCTGTCCACTGGGCCATTGTGGTGTAGCTTCAGATGGTGAAGCATTCTCCCCAG
TGATGTCTTGATCCGATATCTAACGCTTTAAATGGCTACTTTGGTTTCTGTCTGTAAAGTTAAGACCTTGGATG
TGGTTAATTTGTTGCTCTCAAAGGAATAAACTTTTCTGCTGATAAGATAAAAAAAAAAAAAAAAA

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FIGURE 1431

MQLKPFMEINPEMLNKKVLSRLGVAGQWRFDVLGLEEESLGSVPAPACALLLFPLTAQHENFRKKQIEELKGQEV
SPKVYFMKQTI GNSCGTIGLIHAVANNQDKLGFEDGSLKQFLSETEKMSPEDRAKCFEKNEAIQAADVAQEG
QCRVDDKVNHFILFNNVDGHLIELDGRMPFPVNHGASSEDILLKDAAKVCREFTEREQGEVRFSAVALCKAA

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FIGURE 1432

GCCAAACACCAGAGACCCCTAGAGGTTTAACTAAAAGAATGCTCATGTTTGACCCAGTTCCTGTCAAGCAAGAG
GCCATGGACCCTGTCTCAGTGTATACCCATCTAATTACATGGAAATCCATGAAGCCTAACAGTATGGGGTCATC
TACTCCACACCAATTGCCTGAGAAGTTCCTTCAGACCCAGAAAGTCTGTGCGCACGGAATACAGATGGAGCCAGTG
GACCTCACGGTGAACAAGCGGAGTTCACCCCTTCGGCTGGGAATTCGCCCTCCTCTCTGAAGTTCCTGCTCCTCA
CACCGGAGAGCCTCGCCTGGGTGTAGCATGCTTCTTCCAGCCACCGGATAAAAAATACTACCCCTTCTCCA
GGCGTGCAGCCTTCGGCGTGCCGCTGTCCATGCCACCAAGTATGGCAGCTGCCCTCTCGCGGCATGGAATACGG
AGCCCGGGGATCCTGCCGTCATCCAGCCGGTGGTGGTGACGCCCGTCCCTTTATGTACACAAGTCACCTCCAG
CAGCCTCTCATGGTCTCCTTATCGGAGGAGATGGAAAATTCAGTAGTAGCATGCAAGTACCTGTAATTGAATCA
TATGAGAAGCCTATATCACAGAAAAAATTAATAAGAACCTGGGATCGAACACAGAGGACAGATTATATCCT
GAAGAAATGTACCCCCCTTAATGAACCTCAGTGTCCCCCGCAAGCATTGTTGCAAGAGAATCACCTTCGGTC
ATCGTGCAGCCTGGGAAGAGACCTTTACCTGTGGAATCCCCGGATACTCAAAGGAAGCGGAGGATACACAGATGT
GATTATGATGGATGCAACAAAGTGTACACTAAAAGCTCCCACTTGAAAGCACACAGAAGAACACACACAGGAGAA
AAACCTTACAAATGTACATGGGAAGGTGCACATGGAAGTTTGCTCGGTCTGATGAACATAACAAGACATTTCCGA
AAACATACTGGAATCAAACCTTTCCAGTGCCCGGACTGTGACCCGAGCTTCTCCGTTCTGACCATCTTGCCCTC
CATAGGAACGCGACATGCTAGTCTGATTGCCCTGTGTCTCTGCCCTCAGCGTGACTCCCCACTCACCTGGCTCTC
TCTCTGCTCTGCCCTCCATTATCTAACACATTTTTACATGTACATTTAATTTGATTGAGCTGGTCTGAAATCTC
TGAATTTATATCATCCAAACTTCCATATGGTCAGTAGTAGATGTTCTCTAATCTCCCTCTCCTTACCACGGGT
CAGACCTAAAGAATGTGAACACTTTTT

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FIGURE 1433

CCTTTCCGTCTGGCGGCAGCCATCAGGTAAGCCAAGATGGGTGCATACAAGTATATCCAGGAGCTATGGAGAAAG
AAGCAGTCTGATGTACGCGCTTTCTTCTGAGGGTCCGCTGCTGGCAGTACCGCCAGCTCTCTGCTCTTCACAGG
GCTCCCCGCCCCACCCGGCCTGATAAAGCGCGCCAACTGGGCTACAAGGCCAAGCAAGGTTACGTTATACATAGG
ATTTGTGTTAGCCGTGGTGGCCGAAACGCCCAAGTTCCCTAAGGGTGCAACTTACGGCAAGCCTGTCCATCATGGT
GTTAACCAGCTAAAATTTTGTCTGAAGCCTTCAGTCCGTTGCGGAGGAGCGAGCTGGACGCCACTGTGGGCTCT
GGGAGTCCTGAATTTCTTACTGGGTTGGTGAAGATTCCACATACAAATTTTTTGAGGTTATCCTCATTGATCCATT
CCATAAAGCTATCAGAAGAAATCCTGACACCCATGGATCACCAAACAGTCCACARGCACAGGGAGATGCGTGG
GCTGACATCTGCAGGCCGAAAGAGCCGTGGCCTTGGAAGGGCCATAAGTTCCACCACACTATTTGTGGTTCTCG
CCGGGCAGCTTGGAGAAGGCGCAATACTCTCCAGCTCCACCGTTACCGCTAATACAAGTAAAGTTTGTAATAATC
ATACCTAATAAGICTGCAGATGTTTCTTGAATGC

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FIGURE 1434

CAGCCATCAGGTAAGCCAAGATGGGTGCATACAAGTATATCCAGGAGCTATGGAGAAAGAAGCAGTCTGATGTCA
CGCGCTTTCTTCTGAGGGTCCGCTGCTGGCAGTACCGCCAGCTCTCTGCTCTTCACAGGGCTCCCCGCCACCC
GGCCTGATAAAGCGCGCCAACTGGGCTACAAGGCCAAGCAAGGTTACGTTATACATAGGATTTGTGTTAGCCGTG
GTGGCCGTAACCAGCTAAAATTTTGCTCGAAGCCTTCAGTCCGTTGCGGAGGAGCGAGCTGGACGCCACTGTGGG
GCTCTGGGAGTCCTGAATTCCTACTGGGTTGGTGAAGATTCCACATACAAATTTTTTGAGGTTATCCTCATTGAT
CCATTCCATAAAGCTATCAGAAGAAATCTGACCCCCATGGATCACCAAACCAGTCCACAAGCACAGGG

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FIGURE 1435

GCCGCTGCCACCGCACCCCGCCATGAGCGGCGCTGCTGCGCGCCCTGCTCCTCGGCGCGCTGGGCTGCTGCT
CCTGCTCCTGCCCCCTCTCCTCTTCCTCCTCTTCGGACACCTGCGGCCCCCTGCGAGCGGGCTCCTGCCCCCCCCCT
GCCCCCGCTGGGCTGCGTGTGGGCGAGACCCGCGACGCGTGCGGCTGCTGCCCTATGTGCGCCCCGCGGCGAGGG
CGAGCCGTGCGGGGTTGGCGCGCCGCGCAGGGGTTACTGCGCGCCGGGCATGGAGTGCGTGAAGAGCCGCAAGAG
GCGGAAGGGTAAAGCCGGGCGAGCAGCCGGCGGTCCGGGTGAAGCGGCGTGTGCGTGTGCAAGAGCCGCTACCC
GGTGTGCGCGACGACGGCACCACTACCCGAGCGGCTGCCAGCTGCGCGCCGCCAGCCAGAGGCGCGAGAGCCG
CGGGGAGAAGGCCATCACCCAGGTGAGCAAGGGCACCTGCCGAGCAAGGTCCCTCCATAGTGACGCCCCCAAGGA
CATCTGGAATGTCACTGGTGCCAGGTGTACTTGAGCTGTGAGGTGATCGGAATCCCGACACCTGTCTCATCTG
GAACAAGGTAAAAGGGGTCACTATGGAGTTCAAAGGACAGAACTCCTGCTTGGTGACCGGACAACTGGCCAT
TCAGACCCGGGTGGCCAGAAAAGCATGAAGTAAGTGGCTGGGTGCTGGTATCTCCTCTAAGTAAGGAAGATGC
TGGAGAATATGAGTGCCATGCATCCAATTCCTCAAGGACAGGCTTCAGCATCAGCAAAAATTACAGTGGTTGATGC
CTTACATGAAATACCAAGTGAAGGTTGAAGGTGCCGAGCTATAACCTCCAGAAATATTATTAGTCTGCATGGT
TAAAGTAGTCATGGATACTACATTACCTGTTCTTGCCTAATAAGTTCTTTTAAATCCAATCCACTAACACTTT
AGTTATATTCACTGGTTTTACACAGAGAAATACAAAATAAGATCACACATCAAGACTATCTACAAAAATTTATT
ATATATTTACAGAAGAAAGCATGCATATCATTAACAAATAAAATACTTTTTATCAAAAAA

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FIGURE 1436

MERPSLRALLGAAGLLLLLLPLSSSSSDTCGPCEPASCPLPLPGCLLGETRDAGCCCPMCARGEPEPCGGGG
AGRGYCAPGMECVKSRKRRKGKAGAAAGPGVSGVCVCKSRYPVCGSDGTTYPSCGQLRAASQRAESRGEKAITQ
VSKGTCEQGPSIVTPPKDIWNVTGAQVYLSCEVIGIPTPLIWNKVKRGHYGVQRTELLPGDRDNLAIQTRGGPE
KHEVTGWVLVSPLSKEDAGEYECHASNSQGGQASASAKITVVDALHEIPVKKGEAEL

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FIGURE 1437

GGCACGAGGCTCGGGTCAAATGCGCGCCTCGGACCCTAGTGC GCGTGC GCGTGGTGGCTCCGCCCTTTGGAGC
TACTTTCCTCATCTGCCCCGTCCGCTACCGTTAGGCTGCTGAGCCTTTTCCTTCGTGGATCCGCTCCCACGGCA
GCGCGCATGGCTCCGGGAGCCGCTCTTGAGAGGAGGTGCGCTGCCGCTCTCTTCAGCACTCATTCGAT
CTGGGACGCGAGCTTCCTTATGACCCCGTGGACACGGAGGCGCTTTGGAGAAAGTGGTGACATGCAGGAGCGCTTT
CTGTTCCCGGAGTACATCCTGGATCCGGAGCCGCAACCCACCCGCGAAAAAGCAGCTGCAGGAGCTCCAGCAACAG
CAGGAGGAGGAGGAGCGACAGAGGCGACAGCGCGGAGGAGCGGCGACAGCAAACTACGGGCGAGGTCCCGG
GAGCACCCGTCGTGGGACACCCGAGCCGCGATTGCCGCCACGCGCGCTGAAGTGTCTGGGCTCGCGGGCAGAG
CTGCACTGCCAGGACGCCGAGTGCCCGGCTACCTGCCCGAGAGAAATTCCTCCGCAGCGCGGAGGCGACAGCGC
GGGCTGGCACGGACCGTGTGCCAGCGCTGCTGGCTGCTGTCGCCACACCGCGCGCGCTCTACGCTGCAGGTGAGC
CGCGAGCAGTACTGGAGCTGGTGAGCGCCGCTTGCGCGGCGCGGCCCTCTCTGGTGCTCTACATGGTGGAC
CTGCTGGACCTGCCGACGCCCTGCTGCCGACTTGCCGCGCTGGTGGGCCCCAAGCAGCTGATCGTGTGGGA
AACAAATGGAGCTCCTGCCAGGATGCTCCTGGCTACCGGACAGGCTGCGGGAGCGACTGTGGGAGGACTGT
GCCCGCGCGGGCTCCTGCTGGCCCCGCGGCCACCAAGGGCCACAGCGCCCCGTCAAGGACGAGCCACAGGACGGG
GAGAAATCCGAATCCGCCGAATCTGGTCCGACAGTGGTCAGGAGCTGCGGCTGATCAGCGCAAGACCGGCTAT
GGAGTGGAAAGATTGATCTCTGCCCTTCAGCGCTCTTGCGCTACCGTGGGGAGCTCTACTTAGTGGGCGCCACC
AACCGCGGCAATCCACTCTCTTTAACACGCTCCTGGAGTCCGATTACTGCATGCCAAGGGCTCCGAGGCCATC
GACAGAGCCACCATCTCCCTTGCCAGGTAATACTTAAACCTTCTGAAGTTTCTTATTGCAACCCCACTCCT
TACAGAATGTTTAAAGGACATCAAGACTTAAAAAGATTCAACTCAAGCTGAAGAAGATTCTTAGTGAGCAAGAA
CAAAATCAGCTTAATGTCTCAAAAAGCATGGTTATGTCGTAGGAAGAGTTGGAAGGACATCTTGATTACAGAA
GAACAGAAGGATAACATTCCTTTGAGTTTATGCTGATTCACTTGCTTTGACATGGAATAAGACCTGTTATG
GGTACACACAATCCACCAACAAGTAGAATTGACTGCACAAGATGTAAAGATGCCACTGGTTTTATGACACC
CCTGGAATTTACAAAAGAAATTGATTTTAAATCTTCTAACAGAAAAGAAGTAAATATTGTTTTGCCAACACAG
TCCATTGTTCCAAAGACTTTTGTCCTTAAACAGGAATGGTTCTGTTTTGGGTGCTATAGCGCCCATAGATTTC
CTGACGGGAAATCAGTCAGCTTGTTTACAGTCGTGGCTTCCACATCTCTCTGTGCATATCACCTCCTTGGAC
AGGGCAGACGCTCTGTATCAGAAGCATGCAGGTACATAGTTACTCCAGATCCAATGGGTGGAAGAAGACGAATG
GCAGGATTTCTCTCTTGTTGCTGAAGACATTATGTTAAAGAAGGACTGGGGCATCTGAAGCAGTGGCCGAC
CCTGAAGAACAGTTTTGACCGTCCGGCCCCCTCTCTTGCCATATATTGTTAAACATCAAGGACAGCGCATCAAG
AAAAGTGTGGCTATAAAACCAAGAAGCTCTCTCTCTTATGTACAACGTGAGGAAGAAGAAAGAAAGATAAAT
GTATGAGACCGACCTTGTTCACCTCCAGATATTAAGTGTATTGAACACAACAAATACATGAATTTGATTTAAAC
ATATAACGCATAAATAAAGCTCCATTCTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1438

MLPARLPFRLLSLFLRGSAPTAARHGLREPLLERRCAAASSFQHSSSLGRELPYDPVDTEGFGEAGDMQERFLFP
EYILDPEPQFTREKQLQELQQQEEEEERQQRREERRQONLRARSREHPVVGHFPDAPLPSPGVNCSGCGAELHC
QDAGVPGYLPREKFLRTAEDGGLARTVCQRCLLSHRRRLRLQVSREQYLELVSAAALRRPGPSLVLYMVDLLD
LPDALLPDLPALVGPQLIVLGNKVDLLPQDAPGYRQRLRERLWEDCARAGLLAPGHQGPQRPVKDEPQDGENP
NPPNWSRTVVRDRLISAKTGYGVEELISALQRSWRYRGDVYLVGAINAGKSTLFNTLLES DYCTAKGSEADRA
TISPWP GTTLNLLKFPICNPTPYRMFKRHQRLKKDSTQAEEDLSEGEQNQLNVLKKHGYVVG RVGRTFLYSEEQK
DNIPFEFDADSLAFDMENDPVMGTHKSTKQVELTAQDVKDAHWFYDIPGITKENCILNLLTEKEVNIVLPTQSIV
PRTFVLKPGMVLFLGAIGRIDFLQGNQSAWFTVVASNILPVHITS LDRADALYQKHAGHTLLQIPMGKKERMAGF
PPLVAEDIMLKEGLGASEAVADIKFSAGWVSVTPNFKDRHLRGYTPGTVLTVRPPLPYIVNIKGQRIKKS
V
AYKTKKPPSLMYNVRKKKKIN

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FIGURE 1439

GAAAGCTGTATTGTCTGCACGTGGAAATCTCCGTTATTTTCCAGCACCCAAACAGTAGCGTAATGGGAGTAACGGA
CTTAACCTCATTTCTCTTTAGAGACATTTAGCCTTCATATGCCCTTCCCTGCATGCTTCCCCAGGCCCGTCAAGA
CTTGAGTTCTGCCTCGCTTCCCGCGCGGTGCGAGCCCTCAGCCCACTTAGGATAATGGCGACAGCTGAGGTACT
GAACATTGGTAAAAAATATATAGAGGTAAAAAAGAAAGTCTACGAATTTGTAGACAGTCCAGGAAAAAGCTCT
CCTGCAGTCCAAGGACCAGATTACAGCAGGAAATGCAGCTAGAAAAAACCCACTGGAAAGGAAAGCTGCAATCTC
AAATAAAATCACCAGTTGTATTTTTCAGTTATTACAGGAAGCAGGTATTAACACTGCTTACCAGAAAAATGTGG
GGAGACAGCTTTCATTGCACCCGAGTGTGAATGATTCCAATTGAAATGGGTTTGCAGAAAGATAGCAACTGGTTT
TTTTCTCAAAGAAATCCTGGTGTCAAGGAAGGATATAAGTTTACCACCTAAAGTGGAGTTGTTTTCAAGGA
TGATGCCAATAATGACCCAGCTGGTCTGAGGAACAGCTGATTGCTGCAAAATTTGCTTTGCTGGACTTCTTAT
AGGCGACACTGAAGTGGATATCATGAGTCATGCTACACAGGCTATATTGAAATACTGGGAAATCCTGGTTGCC
CCAGAATTGTACACTGGTTGATATGAAGATTGAATTTGGTGTGATGTAACCAACCAAGAAATTTGTTCTGCTGA
TGTTATTGACAATGATCCTGGAGACTCTGGCCATCAGGAGATCGAAGCCAACAGAAAGACAAACAGCTTTATCG
GGACCTCAAAGAAGTAACCTCTGAAGGGCTCCAATGGTAAAGAAAACTTTGAGTGGTTCGAGAGAGAGTAGA
GTTGCTTTTGAATCAGAAAGTCAGTGCAGGGTTGTAGTGTGATGGGCTCTACTTCTGATCTTGGTCACGTGTGA
AAAAATCAAGAGGCCCTGTGGAAATTTGGCATTCATGTGAACCTCGAGTAACATCTGGCATAAAGGACCAGA
TGAAACTCTGAGGATTAAAGCTGAGTATGAAGGGATGGCATTCCTACTGTATTTGTTGGCAGTGGCAGGAGAAG
TAATGGTTTGGGACCAGTAGTGCTGGGAACACTGCATATCCAGTTATCAGCTGTGCTCCCTCCACACAGACTGT
GGGAGTTCCAGATGTGTGGTCTTCTCTCAGCTACCCAGTGGTCTTGCTGTTCAACCGTACTTTCTCCAGAGG
ATCAGCTCAATTTGCTGCTCAGATAATTGGGTTAAGCAACCATTTGGTATGGAGCAAACTCCGAGCAAGCATTT
GAACACATGGATTTCCTTGAAGCAGGCTGACAAAGAAATCAGAGAATGTAATTTATAAGAAAGAAATGCCATTGAA
TTTTTTAGGGGAAAAACTACAAATTTCTAATTTAGCTGAAGGAAAAATCAAGCAAGATGAAAGGTAATTTAAAT
TAGAGAACCAAAATAAAATGATTAGTGAATAAATGCTTCTCTAGATCCATATTAATAAATCAGACATCTCAACC
CCTCCTTCTTAGGCTAGACACCAAGATATTTACAGCCAGCCTTTATCATCTCTTACTTTTCTCTTTTCCITA
AGTATTGGTGGTCACTACTATTGAGTTTCTCCTTAACACTGATTAATATGATCTTAACCTCCTCAGCTAAAACGTG
GCATTACTGACTCCCAGCTATATTTCTCAGACTTGCATTTTTTTTTTTTTTTTGGAGCAGGGTCTCACTGTGG
CCCAGGCTGGAGTGCAGTGGCGTGATCTCAGTTCACTGCTGCTTTCCTCCTGGGCTCAAGCAGTTCTCCACCTG
CAGCCTCTCGACTAACAGGGACTATAATCTTGACGACCATGCCAGCTAAATTTATTTTTTGTAGAGATGAGCT
CTCATATGTGCACCAGGTTGCTCTCAAACCTCGTAACCTTAGTAATTTCTCTATCTCAGCCTCCCAAGTGGCTA
GGGTTACAGACTGAGCCACTGCGCTGCTAGACTTGACTTTCAACTGTGCATTTCTCCCTGTCTGCCATG
GGCACTCATGAAAAACAGAATGCTCCCACTTTTATCATCTTCCAAGCCTGTAGCTCTTGGTATATCACTCATGTT
GCAAGTCAGAAGCTTGATTTTCATCATTGATGTTTTCTCAGTTTTCATCTCAGCTCATCAACCAAGTCACTTGG
TGTTAATTTCTGATTAAACCTTTGAAATTTACCGCTTCTCATCTCTCTGTACAAAAGCCTCAAGTGAAGGTCATAAT
CAACATTAATCCTGACTAGACAGCCCCCATCTCAATCCACCCTTTTCCAAGTGTATGCCCCAAGGACTTCTAAC
AATAAACTCTCTTTTGACACAGCTACTCTTTGAAAAATACATGCTGTGACCCCTCTGTGTAGAAAACGGGACA
CATAAACTTACCAACAGATTTTCATGGTTCTTGGGTTCTCCCGAAGCCTTATCCATGGTTATAGATTAAGAAT
GATGAGGTAGCTGGGCACAGTGGCTCACACCTACGATCAGCACTCTCGGGAGGCTGAAGCAAGCAGATCACTTG
AGGTCAGGAGTTGTCAGCAGCCTGGCCAAACATGGTGAACCTGTCTCTACTAAAAATACAAAAGTAGCCAGC
CGTGATGACAGGCACCTGTAATCCAGCTACTCGGGAGGCTGAGGCATGAGAATGCTTGAACCCGGGAGGCGGA
GTTGCACTGAGCCTAGATCATGCGACTGCACCTCCAACCTGGGACGACAGCAAGACTGCTGTCTCAAAAAGGGGA
AAAAAAATTTGCTGATGTGACCCATGAAGGGAACCTCATTTTCTCGTAATTTTGAAGTGCACACATTTGAGTCT
TAGATTCTGTAAGGCCACAGTTTTATCATTAAAGCACTATTGTTAGCTAGTAGAGCTTTATGTTCTGCTGTCCCA
TGAAACCTTCTGTAACCAACAGTGACTACAAGTAGTTCTTCTCTATTGAATTTAGGTCCAGAATAGAAGATGT
CATTGTACACTTTATTTCCCTCAGACTGTGTTATGCTCTGATGTGCTATGCTTAGCTATCTGTCAGAGATTAGTA
AATTATAAACTCATGTGACTACTTAAGTTTATATCTTATGCTAGTTTATAAGAACAAATTAAGGACTTAGAA
GATTAA

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FIGURE 1440A

TCGGGAAGGAAGAGCTGTCGCGAGCGGAGCTTCTGAGCTCGACGGGCCGAGCTGCGAGCTGGTTGGTGCTTAC
ACCTTGGCCGCGAGCGGCGAGTCTTCCACGTGCTTTCGGCGCGGACATGGAGCTGGAGGAGTTGGGGATCCGAGA
GGAAATGGGCGGTGTTGGGGTGCATGCGCTCAGGAAGTGGCCACGCACTGGATGTACCGCATGTGATCACTCT
GGGACTCGTGGGGCTGCAGCACCCGGGGTCAGGAAGTGTGTTGATCTGAGTGTAGGAGTTCGGTGGCCAACT
ATTCAAATCACACAAGGGAATGGGTCTTGTAATCAACGCTTTTACTGAAGACAATTTGA AAAAATATATATGTTTC
AAATCTTGAATTTGGACACACAGGATGTCACACAGGAAATGTGACGAGAAATTTGTCAGCCCTTCGTTGT
TGAAACACTTTCATGGGAAGATAGCTGTGGCACAATAATGGCGAATTTGTAATGTCTCGATTAAAGGAAAAAGCT
TCTGCGTCATGGTATTGGTCTGCTACAACTTCTGATAGTGAATGATTACCCAGTTACTGGCGTATACCCCTCC
TCAGGAACAAGATGACACCCGAGCTGGGTAGCCAGGATTA AAAA ACTTGATGAAGGAAGCACCCACGACATCTC
CCTGCTTATAATGCACAGAGATGTTATTTATGCAATACGAGATCCTTATGGAATTCGTCCTTATGCATTTGGTCTC
TCTTATTCAGTGTCTGATATAAATGACAAAAGAAAAAACAATCAGAAACAGAGGATGGGTGGTGTCTTCAGA
ATCTTGTAGCTTCTTATCTATTGGTGCAAGATATTACCGTGAAGTCTTGCTGGGAGAAATTTGGGAAATATCCAG
ACACAATGTCCAACTCTTGATATTATATCAAGGTCTGAAGGAACCCAGTGGCTTTTGTATCTTTGAATATGT
TTATTTTGAAGACAGACAGTATGTTTGAAGACCAATGGTTTATACAGTAAGATACCGTTGTGGCCAGCAGCT
AGCGATTTGAAGCCTCTGGTGGATGCAATTTGGTTAGCACTGTTCCAGAATCTGCTACGCTGCTGCTCTTGGCTTA
CGCAGGAAATGTGGACTTCCATATGTGGAGGTGCTGTGTAAAAACCGGTATGTAGGAGGAACTTCTTACGCC
AAAACTAGGTTAAGACAACCTTGGTGTGCAAAAAAATTTGGAGTATTGTGCAGCACTTTAAAGGCAAAAGAAAT
TGTTCTGTAGATGATTCAAATGTGACAGGCAATACCCTCACTCACTATAAAAACTGCTCAAGAACTCTGGTGC
AAAAAGAGGTACACATTCGAGTAGCTTCCACCAATTAATATCCATGCTTCA TGGGAATAAACATTCCTCAAAA
AGAAAGCTCATTGCCAATAAACAGAAATTTGATCACTTGCAGAAATATCTAGGAGCAACAGTGTGTGTATCT
GTCAAGAGGATCGTGTTCATCTGTCAAGAGGGATAAAGTTTAAAAAACAGAAAGAGAAAGACCGATAT
GTATGATCCAAAGAAATGGAATGGTCTGGAATGTTTGAAGAGAGTGGCTATTGTACAGTCTGCTCACTGGAAA
ATATCCTGTAGAAATGAAGATGGTAGCTGGTAGGGTTGGATGTGTGTAGTTTCAAGATAGAAGTTGGTCAAGAG
TTATAGTGGTACACCTCATATTTTACTGTTACTAGTTGGTACAATGTAAAAAGGCAATGCTTATGTTTATAAG
TTTTGAGATTTTTTTTTTTTCTGAAAAGGATACCAAGTGGGATAACTGAACATTTCCAATTGCAATATAATACAA
CAATATGTGGTGTCTTTTTTTTACACAAGCATTTGGCTAGCCTTTTTAACTGGTGCAGAGAAGGCGAGGTGCTC
TGACATTTCCCAAGTCCATGCTTTAAAGGGTTTGAAGAAGTTAGGGTTAAGGAGAGGTGATGCCAACAGACAG
GTGAGTTAAATATACCATTTACACAAAAGTTTGAATAGAATACATTATACCTCATAGTGTCTAGCCTCATAGT
TCTGGCTGATGTTATGACCTTGGCTTCCCTGCTCACTGCTAGACAACTTTTAAAAAATAATAATAATCTGG
TGCCCTCAGTTTCCCAACATGTGCAATGGGATACTTATTAATAATTAATAAGAAATGTGAATAAGTGTCAATCTTT
TGTGATTTGAGCCATCATTTCACTCTGATTTTAAAGCAACCTCATGATTGTTAGCTTTTGAAGAAGTCAATGATTG
TTAACTTTTTGAAATTGTTTTTACAATTAATTAAGATTTCATTATGATGAAGAGAGACATAATTTGGCAGATCTTTG
CCAATCTCTCTTTGAGATGTCCATAAAAGGGTTGTA AAAATCTGTGAAAAGTTTTTTCTACATTTGACTAGAAA
TGTGATCCATAGATTATAGTGCCCTGATCATATAAGCTCAGCAAGTCACTTGGATTTTGAATTA AAAACCAA
TTTTAGATTCAACAATCCCTTTATCCCTTAATTTAATTAATATCATATGCTTTTTTAAATGAAGTGTCTGTATC
ACTTGCAACATATATACATGTAGATGTACATATACATGACACATACATAAATATTATGCAATTAAGTGAT
CAAGTACAGACACAATAGGGGCCGATTTTGTGTTAAGGATCAAAAGAGACAACCACTTTGGGGAATTAGTATCAAT
TACAATCCAAGTCCAAGTATCATCTTATAATCACTTTTTTCTACTATATTAAGATCTAATGAATTTGATTTCTTT
TTTGAAGTTTTTCTGTGTAACATCTGAGATTAGAAGTTAAGATGACTTGACCCCAACCTTTGTTTATGTGAAGA
ATTTTTAAACATAAAAGTGTGTGTTCTGTTATGTTACCATAATTTGATGATATAGTGTCCAGATCCATTTAGA
AATTTAAATATTTATTAATCACTGAACTGTTTGTCTTCTTTGGTATATAGTCTCGCATATTATATATAGCAGG
CCAAGATAAAATTTGACAGCTCTTTTAAAGCCACATGCAAGTGGGTCAGTATACCCCTGTGGCAGTGACACGGG
CAAATTTGGCACTTTGAATAAGCCCTGGGACCACCTCAACATGCTGAGCCTCTTGCTCTAAATGTACTCCCCATGG
CAGCATGGAGGAGGCAAGACTGTGGGTCAATTTTGAAGTGGCCTTACTTTTAAAAACAGAGACTCAGG
GAAAGTACTAAACCAAAATCTCTGATTTTACTTTGCGTTTTCTGTAGTTTTGTGTTTACTGAGATGCTTTTGTA
AGGAAAAATACTGTGACAGTTTAGTAATTTCTACAGATCTTAAATTTCTCCATCACTGGCCTTTACTGTGA
ATTTTCTGAAGTCTGAATTCAGTTCAATTAATTTTTTTTAACTTAATCTCAAGTGTGTTTAACTGCTTTAAAT
TCATATACGTAGAGTATTATAAATCGACAGATGAAAAATGTGTTTTCACGGGATTATATTGTGAACATAAATA

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FIGURE 1440B

AGCCTACTTTTGTGACTTATTTGTGATGCCTTGTGATAAATATGTGTAATAAGTATGTTT

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FIGURE 1441

CTCTTTCCCATCTTGCAAGATGGCGGGTGAAAAAGTTTGAAGCCAGATACTAAAGAGAAGAAACCGAAGCCAA
GAAGACTGATGCTGGTGGCAAGGTGAAAAAGGGTAACCTCAAAGCTAAAAAGCCCAAGAAAGGGGAAGCCCCGTTG
CAGCCGCAACCCCTGTCTTGTCAGAGGAATTGGCAGGTATTCCCGATCTGCCATGTATTCCAGAAAGGCCATGTA
CAAGAGGAAGTACTCAGCCGCTAAATCCAAGGTTGAAAAGAAAAAGAGGAGAAGGTTCTTGCAACTGTTACAAA
ACCAGTTGGTGGTGACAAGACGGCGGTACCCGGGTGGTTAACTTCGCAAAATGCCTAGATATTATCCTACTGA
AGATGTGCCTCGAAAGCTGTTGAGCCACGGCAAAAAAACCCCTTCAGTCAGCACGTGAGAAAACTCGGAGCCAG
CATTACCCCGGGACCATTTCTGATCATCCTCACTGGACGCCACAGGGGCAAGAGGGTGGTTTTCTTCTGAAGCAGCT
GGCTAGTGGCTATTACTTGTGACTGGACCTCTGGTCTCAATCGAGTTCTCTATGAAGAACACACCAGAAATT
TGTCATTGCCACCTCAACCAAAATCGATATCAGCAATGTAAAAATCCCAAAACATCTTACTGATGCTTACTTCAA
GAAGAAGCAGCTGCGGAAGCCAGACACCAGGAAGGTGAGATCTTCGACACAGAAAAAGGGAAATATGAGATTAC
GGAGCAGCGCAAGATTGATCAGAAAGCTGTGGACTCACAATTTTATCAAAAATCAAAGCTATTCTCAGCTCCA
GGGCTAGTTGCGATCTGTGTTGCCCTGACGAATGGAATTTATCCTCACAAATTGGTGTTCTAAATGTCTTAAGA
ACCTAATTAATAGCTGACTAC

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FIGURE 1442

GTTTTTAGTTTGTAGCTGCCTGGAGTGTTATTTTAAGAAAGCAGAAGCACCATCATTGCACTCCCTATAGA
TCACACACCTTAACCCTGACTTTTTTTTGCTCCAGTTTTTCAGAAGAAGTGAAGTCAAGATGAAGAACCATTGCT
TTTCTGGGGAGTCTCGCGGTTTTTATTAAAGGCTTTCATGTGAAAGCCCAAGAAGATGAAAGGATTGTTCTTGT
TGACAAACAAATGTAAGTGTGCCCGGATTACTTCCAGGATCATCCGTTCTTCCGAAGATCCTAATGAGGACATTGT
GGAGAGAAACATCCGAATTATTGTTCCCTCTGAACAAACAGGAGAAATATCTCTGATCCCACTCACCATTGAGAAC
CAGATTTGTGTACCATTGTGCTGACCTCTGTAAAAATGTGATCCTACAGAAGTGGAGCTGGATAATCAGATAGT
TACTGCTACCCAGAGCAATATCTGTGATGAAGACAGTGCTACAGAGACCTGCTACACTTATGACAGAAACAAGTG
CTACACAGCTGTGGTCCCACTCGTATATGGTGGTGAGACCAAAATGGTGGAAACAGCCTTAACCCAGATGCCTG
CTATCCTGACTAATTTAAGTCATTGCTGACTGCAATAGCTCTTTTTCTTGAGAGGCTCTCCATTTTGATTGAGAAA
GTTAGCATATTTATTACCAATGAATTTGAAACCAGGGCTTTTTTTTTTTTTGGGTGATGTAACCAACTCCCT
GCCACCAAAATAATTTAAATAGTCACATTGTTATCTTTATTAGGTAATCACTTCTTAATTATATGTTACATCTCT
AAGTATCAAAATCTTCCAATTATCATGCTCACCTGAAAGAGGTATGCTCTCTTAGGAATACAGTTTCTAGCATT
AACAAATAAACAAAGGGGAGAAAATAAACTCAAGGACTGAAATCAGGAGGTGTAATAAAATGTTCCTCGCAATC
CCCCCGCTTTTTTTTTTTTTTTGACTTTGCTTGAGAGCCAGAGCTCCGCATTTTCTTACTATTCTTTT
AAAAAAGTTTCACTGTGTAGAGAACATATATGCATAAACATAGGTCAATTATATGCTCCATTAGAAAAATAAT
AATTGGAACAATGTTCTAGAACTAGTTACAAAAATAATTTAAGGTGAAATCTCTAATTATTATAAAGTAGCAA
AATAAATGCATAAATTAATAATATTTGGACATAACAGACTTGAAGCAGATGATACAGACTTCTTTTTTCATAA
TCAGGTTAGTGTAAGAAATTGCCATTTGAAACAATCCATTTGTAACGAACTTATGAAATATATGATTTCAT
GGTACGTATTCTCTAGCACAGTCTGAGCAATTAATAGATTCTAAGCATA

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FIGURE 1443

GGTGCTGCAAGACTCTCTGGTAGAAAAATGAAGAGGGTCTCGGTACTACTGCTTGCTGTGGCATTGGACATGCT
TTAGAGAGAGCCGGGATTATGAAAAAATAAAGTCTGCAAGGAATTCTCCCATCTGGGAAAGGAGGACTTCACA
TCTCTGTCACTAGTCTGTACAGTAGAAAAATTTCCAGTGGCACGTTTGACAGGTGAGCCAACTTGTGAAGGAA
GTTGTCTCCTTGACCGAAGCCTGCTGTGCGGAAGGGGCTGACCTGACTGCTATGACACAGGACCTCAGCACTG
TCTGCCAAGTCTGTGAAAGTAATTTCCATTCCCGTTTACCCAGGCACTGCTGAGTGTGTCACCAAGAGGGC
CTGGAACGAAAGCTCTGCATGGCTGCTCTGAAACACCAAGCCACAGGAATTCCTTACCTACGTGGAAACCCACAAAT
GATGAAATCTGTGAGGCGTTGAGGAAAGATCCAAAGGAATATGCTAATCAATTTATGTGGGAATATTCACATAAT
TACGGACAAGTCTCTGTCACTTTTAGTCAGTTACACCAAGAGTTATCTTTCTATGGTAGGGTCTGCTGTACC
TCTGCAAGCCCACTGTATGCTTTTTGAAAGAGAGACTCCAGCTTAAACATTTATCACTTCTCACCACCTGTGCA
AATAGAGTCTGCTCACAATATGCTGCTTATGGGGAGAAGAAATCAAGGCTCAGCAATCTCATAAAGTTAGCCCAA
AAAGTGCCTACTGCTGATCTGGAGGATGTTTTGCCACTAGCTGAAGATATTACTAACATCCTCTCCAAATGCTGT
GAGTCTGCCTCTGAAGATTGCTATGGCCAAAGAGCTGCCTGAACACACAGTAAACCTCTGTGACAATTTATCCACA
AAGAATTTCTAAGTTTGAAGACTGTTGTCAAGAAAAAACAGCCATGGACGTTTTTGTGTGCACTTACTTTCATGCCA
GCTGCCAACTCCCCGAGCTTCCAGATGTAGAGTTGCCACAAACAAAGATGTGTGTGATCCAGGAAACACCAA
GTATGGAATAAGTATACATTTGAACATAAGCAGAAGGACTCATCTCCGGAAGTATTCCTCAGTAAGGTACTTGAG
CCAACCTTAAAAAGCCTTGGTGAATGCTGTGATGTTGAAGACTCAACTACCTGTTTTAATGCTAAGGGCCCTCTA
CTAAAGAAAGAACTATCTTCTTTCAATTGACAAGGGACAAGAACTATGTGCAGATTATTCAGAAAAATACATTTACT
GAGTACAAGAAAAAAGTGGCAGAGCGACTAAAAGCAAAATTGCTGTATGCCACCCACGGAAGTGGCAAGGCTG
GTTAACAAGCACTCAGACTTTGCTTCCAACTGCTGTTCATAAACTCACCTCCTTTTACTGTGATTCAGAGATT
GATGCTGAATGAAGAATATCTCTAGTCTGAGCATGTTTATTAACCTTTGACCAGAGTTGGAGCCACCCAGGG
GAATGATCTCTGATGACCTAACCTAAGCAAAACCACTGAGCTTCTGGGAAGACAACCTAGGATACCTTTCTACTTTT
TCTAGCTACAATATCTTCATAAATGACAAGTATGATGATTGCTATCAAAATAAATTGAATATATGCAAAACC
AT

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FIGURE 1444

MKRVLVLLAVAFGHALERGRDYENKNKVCKEFSLGKEDFTSLSLVLYSRKFPSTFEQVSQLVKEVVSLEACC
AEGADPD CYDTRTSALS AKSCESNSFPFVHPGTAECC TKEGLERKLCMAALKHQPEFFTYVEPTNDEICEAFRK
DPKEYANQFMWEYSTNYGOAPLSLLVSYTKSYLSMVGSCCTSASPTVCF LKERLQLKHL SLLITLSNRVCSQYAA
YGEKKSRLSNLIKLAQKVPTADLEDVLP LAEDI TNILSKCCESASEDCMAKELPEHTVKLCDNLSTKNSKFEDCC
QEK TAMDV FCTYFMPAAQLPELPDVELP TNKD VCDP GNTKVM DKYTFELSRRTHLPEVFLSKVLEPTLKS LGEC
CDVEDSTTCFNAKGPLLKKELSSFIDKGQELCADYSENTFTYKKKLAERLKA KLDPATPTELAKLVNKHSDFAS
NCCSINSPLYCDSEIDAE LKNIL

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FIGURE 1445

AGCTTTTCTCTTCTGTCAACCCACACGCGCTTTGGCACAATGAAGTGGGTAACCTTTATTTCCCTTCTTTTTCTC
TTTAGCTCGGCTTATTCCAGGGGTGTGTTTCGTCGAGATGCACACAAGAGTGAGGTTGCTCATCGGTTTAAAGAT
TTGGGAGAAGAAAATTTCAAAGCCTTGGTGTGATTGCCTTTGCTCAGTATCTTCAGCAGTGTCCATTTGAAGAT
CATGTAAAATTAGTGAATGAAGTAACTGAATTTGCCAAAACATGTGTGCTGATGAGTCAGCTGAAAATTTGTGAC
AAATCACTTCATACCTTTTTTGGAGACAAATATGCACAGTTGCAACTCTTCGTGAAACCTATGGTGAATGGCT
GACTGCTGTGCAAAAACAAGAACTTGAGAGAAATGAATGCTTCTTGCAACACAAGATGACAAACCAACCTCCCC
CGATTGGTGAGACCAGAGGTTGATGTGATGTGCACCTGCTTTTCATGACAATGAAGAGACATTTTGA AAAAATAC
TTATATGAAATTGCCAGAAGACATCCTTACTTTTATGCCCGGAACCTCCTTTCTTTGCTAAAAGGTATAAAGCT
GCTTTTACAGAATGTTGCCAAGCTGCTGATAAAGCTGCCTGCCTGTTGCCAAAGCTCGATGAACCTTCGGGATGAA
GGGAAGGCTTCGCTGCCAAAACAGAGACTCAAGTGTGCCAGTCTCCAAAAATTTGGAGAAAAGAGCTTTCAAAGCA
TGGGCAGTAGCTCGCCTGAGCCAGAGATTTCCAAAGCTGAGTTTGACAGAAGTTTCCAAGTTAGTGACAGATCCT
ACCAAAGTCCACAGGAATGCTGCCATGGAGATCTGCTGAATGTGCTGATGACAGGGCGGACCTTGCCAAGTAT
ATCTGTGAAAATCAAGATTCGATCTCCAGTAAACTGAAGGAATGCTGTGAAAACCTCTGTTGGAAAAATCCAC
TGCAITGCCGAAGTGGAAAATGATGAGATGCCTGCTGACTTGCCCTTCATTAGCTGCTGATTTTGTGAAAGTAAG
GATGTTTGCAAAAACATGCTGAGGCAAAAGGATGCTTCTCGGGCATGTTTTGTATGAATATCAAGAAGGCAT
CCTGAITTACTCTGTCGTGCTGCTGTGAGACTTGCCAAAGACATATGAACCCTCTAGAGAAGTGCTGTGCCGCT
GCAGATCCTCATGAATGCTATGCCAAAGTGTTGATGAATTTAAACCTCTTGTGGAAGAGCCTCAGAAATTTAATC
AAACAAAATTTGTAGCTTTTGTAGCAGCTTGGAGAGTACAAATTCAGAAATGCGCTATTAGTTGTTACACCAAG
AAAGTACCCCAAGTGCAACTCCAACCTCTGTAGAGGCTCAAGAAAACCTAGGAAAAGTGGGCAGCAAAATGTTGT
AAACATCCTGAAGCAAAAAGAAATGCCCTGTGCAGAAGACTATCTATCCGTGGTCTCTGAACCAAGTTATGTGTG
CATGAGAAAACGCCAGTAAGTGACAGAGTCACCAAAATGCTGCACAGAATCCTTGGTGAACAGGCGACCATGCTTT
TCAGCTCTGGAAGTCGATGAACATACGTTCCCAAAGAGTTTAATGCTGAACAATTCACCTTCCATGCAGATATA
TGCACACTTTCTGAGAAGGAGAGACAAATCAAGAAACAACCTGCACCTTGTGTAGCTCTGTGAACACAAGCCCAAG
GCAACAAAAGAGCAACTGAAAGCTGTTATGGATGATTTCGACGCTTTTGTAGAGAAGTCTGCAAGGCTGACGAT
AAGGAGACCTGCTTTGCCGAGGAGGGTAAAAAAGCTTGTGCTGCAAGTCAAGCTGCCCTAGGCTTATAACATCAC
ATTTAAAAGCATCTCAGCCTACCATGAGAATAAGAGAAAAGAAAATGAAGATCAAAAGCTTATTCATCTGTTTTTC
TTTTTCGTTGGTGAAGCCACACCCCTGCTCAAAAAACATAAATTTCTTTAATCATTTTGCCCTCTTTCTCTGT
GCTTCAATTAATAAAAAATGGAAGAATCTAATAGATGGTACAGCAGCTGTTATTTTCAAAGATGTGTGCTAT
CCTGAAAATTCGTGAGTTCTGTGGAAGTTCCAGTGTTCTCTTATTTCCACTTCGGTAGAGGATTTCTAGTTTC
TTGTGGGCTAATTAATAAATCAATTAATCTCTTCTAAGTT

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FIGURE 1446

TCCATATTGTGCTTCCACCAC TGCCAATAACAAAATAACTAGCAACCATGAAGTGGGTGGAATCAATTTTTTTAA
TTTTCTTACTAAATTTTACTGAATCCAGAACACTGCATAGAAATGAATATGGAATAGCTTCCATATTGGATTCTT
ACCAATGTACTGCAGAGATAAGTTTAGCTGACCTGGCTACCATATTTTTTGGCCAGTTTGTTCAGAAGGCCATT
ACAAGGAAGTAAGCAAAATGGTGAAGATGCATTGACTGCAATTGAGAAACCCACTGGAGATGAACAGCTCTTCAG
GGTGTTTAGAAAACCACTACCTGCCTTTCTGGAAGAACTTTGCCATGAGAAAGAAATTTGGAGAAGTACGGAC
ATTCAGACTGCTGCAGCCAAAGTGAAGGGAAGACATAACTGTTTTCTTGACACAAAAGCCCCACTCCAGCAT
CGATCCCACTTTTCCAAGTTCAGAACCTGTCAAGCTGTGAAGCATGAAGAAGACAGGGAGACATTTCATGA
ACAAATTCATTATGAGATAGCAAGAAGGCATCCCTTCTGTATGCACCTACAATTCTTCTTTGGGCTGCTCGCT
ATGACAAAATAATTCCTCTTGTCTGCAAAGCTGAAATGCAGTTGAATGCTTCCAAACAAAGGCAGCAACAGTTA
CAAAAGAATTAAGAGAAAGCAGCTTGTAAATCAACATGCATGTGCAGTAATGAAAAATTTTGGGACCCGAAC TT
TCCAAGCCATAACTGTTACTAAACTGAGTCAGAAGTTTACCAAAGTTAATTTTACTGAAATCCAGAACTAGTCC
TGGATGTGGCCCATGTACATGAGCACTGTTGCAGAGGAGATGTGCTGGATTGTCTGCAGGATGGGGAAAAATCA
TGTCTCATATATGTTCTCAACAGCACTCTGTCAAAACAAAATAACAGAATGCTGCAAACTGACCACGCTGGAAC
GTGGTCAATGTATAATTCATGCAGAAAAATGATGAAAAACCTGAAGGCTATCTCCAAATCTAAACAGGTTTTAG
GAGATAGAGATTTTAAACCAATTTTCTTCAGGGGAAAAAATATCTTCTTGGCAAGTTTGTTCATGAATATTCAA
GAAGACATCCTCAGCTTGCTGTCTCAGTAATCTAAGAGTTGCTAAAGGATACCAAGAGTATTGGAGAAGTGT
TCCAGACTGAAAACCTCTTGAATGCCAAGATAAAGGAGAAGAAGTAACAGAAATACATCCAGGAGAGCCAAAG
CATTTGGCAAGCGAAGCTGCGGCCCTCTCCAGAACTAGGAGAATATTACTTACAAAATGCGTTTCTCGTGTGCTT
ACACAAAGAAAGCCCCCAGCTGACCTCGTGGAGCTGATGGCCATCACCAGAAAAATGGCAGCCACAGCAGCCA
CTTGTGCCAACCTCAGTGAGGACAAACTATTGGCCTGTGGCGAGGGAGCGGCTGACATTATTATCGGACACTTAT
GTATCAGACATGAAATGACTCCAGTAAACCCCTGGTGTGGCCAGTGTCTGCACTTCTTCATATGCCAACAGGAGGC
CATGCTTCAAGCAGCTTGGTGGTGGATGAACATATATGCCCTCCTGCATTCTCTGATGACAAGTTCATTTCCATA
AGGATCTGTGCCAAGCTCAGGGTGTAGCGCTGCAAAACGATGAAGCAAGAGTTTCTCATTAACTTGTGAAGCAA
AGCCACAAATAACAGAGGAACAACTTGAGGCTGTCAATTGCAGATTCTCAGGCTGTTGGAGAAATGCTGCCAAG
GCCAGGAACAGGAAGTCTGCTTTGTCTGAAGAGGGACAAAACCTGATTTCAAAACCTCGTGCTGCTTTGGGAGTTT
AAATTACTTTCAGGGGAAGAGAACAAAAACGAGTCTTTCATTGCGTGTGAACTTTCTCTTTAATTTAACTGAT
TTAACACTTTTTGTGAATTAATGAAATGATAAAGACTTTTATGTGAGATTCTTATCACAGAAATAAATATCT
CCAAATG

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FIGURE 1447

MKWVESIFLIFLLNFTESTRHLHRNEYGIASILDSYQCTAEISLADLATIFFAQFVQEATYKEVSKMVKDALTAIE
KPTGDEQSSGCLNQLPAPFLEELCHEKEILEKYGHSDCCSQSEEGRHNCFLAHKKPTPASIPLFQVPEPVTSC
YEEDRETFMNKF IYEIARRHPFLYAPTILLWAARYDKIIPSCCKAENAVECFQTKAATVTKELRESSLLNQHACA
VMKNFGTRTFQAIIVTKLSQKF TKVNFTEIQKLVLVDVAHVHEHCCRGDVLDCLDGGEKIMSYICSQQDTLSNKIT
ECCKLITTLERGQCIHAENDEKPEGLSPNLNRF LGDRDFNQFSSGEKNI FLASFVHEYSRRHQPLAVSVILRVAK
GYQELLEKCFQTENPLECQDKGEEELQKYIQESQALAKRSCGLFQKLGEYYLQNAFLVAYTKKAPQLTSSELMAI
TRKMAATAATCCQLSEDKLLACGEGAADIIIGHLCIRHEMTPVNPVGQCCTSSYANRRPCFSSSLVDETYVPPA
FSDDKFIFHKDLCQAQGVALQTMKQEF LINLVKQKPQITEEQLEAVIADFSGLLEKCCGQGEVCF AEEGQKLI
SKTRAA LGV

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FIGURE 1448A

TCACCTTGCCCTGATATTTCAGGTGTCAGAGGGACACAGCCAACTGGGGTCCCTTCTAGGCTGACAGCCGCTCTCC
AGCCACTGCGCGAGCCGCTCTGCTCCCGCCCTGCGCGTGCACCTCTCCGAGCCGCGCTCCGCCAAGCCCCAGCG
CCCGCTCCCATCGCCGATGACCGGGGAGGAGGATGGAGATGCTCTGTGCGCGAGGCTCCCTGCGCTGCTGCT
CTGCGCTGGGTTCCACTCTCTACAGGCGAGTCCCTCAGTACAACTGTGATTCCATCATGTATCCAGAGAGTCCAG
TGATAACTGCACAGCTTTAGTTTCAGACAGAAGACAATCCACGTGTGGCTCAAGTGCAATAACAAAGTGTAGCTC
TGACATGAATGGCTATTGTTGTCATGGACAGTGCATCTATCTGGGACATGAGTCAAACTACTGCAGGTGTGA
AGTGGGTATACTGGTGTCCGATGTGAACACTTCTTTTAAACGCTCCACCAACCTTTAAGCAAGAATATGTGGC
TTTGACCGTGATTCTTATTATTGTTTCTTATCACAGTGTGCGGTTCCACATATTATTCTGCAGATGGTACAG
AAATCGAAAAAGTAAAGAACCAAGAAGGAATATGAGAGAGTTACCTCAGGGGATCCAGAGTTGCCGCAAGTCTG
AATGGCGCCATCAAACTTATGGGCAAGGATAACAGTGTGCGTGGTAAATATTAAATATCCCAATTTTATTAATAAT
ATTTATGTTGGGTCAAGTGTAGTCAATAACACTGTATTTTAATGTACTTGAAAAATGTTTTATTGTTTTGTTTT
ATTTTTCAGACACTATTGCTAATGTATAATGTGCAGAAAAATTTAATATCAAAAGAAAAATGATATTTTATA
CAAGTAATTTCTGAGCTAAATGCTTCATTGAAAGCTTCAAAGTTTATATGCCTGGTGCACAGTGCCTAGAAGTA
AGCAATTCACAGTCTATAGCTCAAGAAATGTTAGCAATGACAGATTCTGTAGCCCTATATATATAGTCAAACTC
GATTTAGTAAGTATGTTTTTATGTTCTCAAATCAGTGATAATTGGTTTGACTGTACCATGGTTTGATGTAGT
TGGCCACATGGTATCATATTTTAAACAATAATGCAATTGAGAAATTTGGGAGAGCAATATAGGCTCGTGTGTA
AACACTACACATTTGAACAAGCTAACCCCTGGGGAGTCTATGGTCTCTTCACTCAGGCTCTCAGCTATATATCTGT
TATATGAGGGGCGAGTGGACAGTTCCCTATGCCAACTCAGCAGTCTACAGGTACTAGTCACTCACTACCGAGT
TCGCTATGTAAAAATGAATGAAAAACAATTTTCTGTAATCTTTTATTAAAGTAGGGGCAATTTTATAGCTTTCAC
AATGTTCTCTTTTGTATATTAACAACATTTATGTGAGGTAATTTATGCTCAACAGACAAATAGAAAAAGTCCAC
ACCTGAAGCGCTAAATTTGCTGTTTTTAAAGAATATTTTAGACTATTTCTTTTATAGGGGCTTTGCTGATCTCTA
ACATTAATACAGCCCAAAATTTGTAGGACTAATTTATTTTAAATATATGAAGACAATAATCTACATGTT
GTCTTAAGATGAAATACAGTTATTTTCATCTTTTATTCAAGGAAGTTTTAACTTTAATACAGCTCAGTAAATGCG
TTCCTCTAGAAATGTAAAGTTATGATTTAAAGTTGTATCTGCACAGAGAAATGGGAAAAAATTAATAATTAAT
ATGGTGTATTTTTCCAAATGAAAAATCTCAATGAAAGCTTTTAAAGTGTAGAAATCTTAAACACACCTTCCTGTG
GAGGCTGAGATGAAAACTAGGGCTCATTTTCTCGACATTTGTTTATTTTTTGGAGAGCAAAAGATTTCCTGCG
ACTCTGAGCCCATAGGTCTCAGAGAGTTAATAGGAGTATTTTGGGCTATTGTCATAAGGAGCCACTGTCTGCCACC
ACTTTTGGATTTTTTGGGAGAGTCTCTTCATCGAATGCTAAACCTTTGAGTAGAGTCTCCCTGGATCACATACCAG
GTCAGGGAGGATCTGTTCTTCTCTACGTTTATCCTGGCATGTGCTAGGTAACAGGAGGATAAATAGCCATGG
CTGACCTCTGGAGCACCAGGTGCCAGSAGTTGCTCCATGTGTATCCATGATATATACCTTGCGTGAACACACA
CGACTGTCTAATGCTCTGCGCCCTGCGCCCTTACTATTAGGAAAAATAACAGACAAACAGTAAATATATATAT
GGTCATATACATATTGTATATATATTCATATACAAACATGTATGTATACATGACCTTAATGGATCATAGAATTGC
AGTCAATTTGGTGTCTGTCAACCATTTATATAAACTTAAACAAAGAGAAAAAGAAATCAATTAGATCTTAAC
AGTTATTTCTGTTTCCATTTATATACAGCTGAAGTCAAAATATGTAAAGACAGCATTTTAAATCTCTCACTACAG
TTGGCCCTCTGTGGTTAGTTCACATCTGTGGATTCAACCAACCAAGGAGCGGAATGCTTAAAAAATAATACAA
CAACAACAAAAAATACATTATAACAACATTTTACTTTTTTTTTTCTTTTTCAGATGGAGTCTCGCTCTGTGCG
CCAGGTTGGAGTGCAGTGGCAGATCTCGGCTCACTGCAACCTCACTCCCGGGTTCAAGAGATCCTCCTGCCTC
AGCCTCTCGAGCAGTGGGACTACAGGCGCATGCCACATGCCAGCTAATTTTGTATTTTATGAGGCGGG
GTTTCACCATGTTGGCAGGATGGTCTCAATCTCCTAACCTTGAGATCCACCTCCAGCAGCTCCCAACCTGCTG
GGATTACAGGTGTGAGCCACCGCACGTAGCATTACATTAGGTATTACAAGTAATGTAAGAGTATTAAAGTATA
CAGGAGGATGTGAATAGTTATATGCAAGCACTATGCCCTTTTATATAAGTGACTTGAACATCTGTGCCCCGATT
TAGTATGTGAGGGGGCGCATCTGGGAATCAGTCCCTCTGGATACCAAGTCAACAGTATTATTATTAACGCTTA
CTAGATGTGAGGAGGTCTGAATATTTTCAGTGATCTTGGCTGTTTCAAAAAATCTATTGACTTTTCAATAAAT
CAGCTGCAATGTTTATTTCATTTACAAAAGATTATTGTAAAGCATCTCAATCTTGGTTTGTGCTGTTATCTTA
AGCATGTCAATTCATAAAAAACAAGTCATTTTGTATTTTTCATCTTTAAGATGCTTAAAAAGCTTAATCCCTAA
AATAAGTTAGATCTTTGTAATGTGATATTAATAAAGTATGACCCACATGCTTTTATGGGTGAAAAAAGA
CAAAAAATAAGTTTATGTAGGATGGTGTGAGTAAACATAAAAAATGATTTCCTCTAGCTGATGTGCTGCTG
ACACAGTGGGAAGATTTTAGTTCACACTTAGTCTAATCCCCCATTTTACAGATTTTCTCACTATATATATTCTA

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FIGURE 1448B

GAAGGGGCTATGCATATTCAATGTATTGAGAACCAAAGCAACCACAAATGCATAAAATGCATAATTTATGGTCTTC
AACCAAGGCCACATAATAACCCAGTTAACTTACTCTTTAAACCAGGAATATTAAGTTCTATAACTAGTACTCAAGG
TTTAAACCTTAAAAATTAAGATTTCCTTAACCTTAAACCTTAAATTTGATATTATATTAACATACATAATACAAITGT
AACTCCACTGTTCTCCTGAATATTTTTTGCTCTAATCTCTGCGGAAAGTCAAAGTGATGGGAGAATTGGTATA
CTGGTATGACTACGCTCTTAAGTCAGATTTTTATTTATGAGTCTTTGAGACTAAATTCATCACCACCAAGGTATCA
AATCAACTTTTATGCAGCAAATATATGATTCTAGTGTCTGACTTTTGTTAAATTCAGTAATGCAGTTTTTAAAAA
CCTGTATCTGACCCACTTTGTAATTTTGTCTCCAATATCCATTCTGTAGACTTTTGAAAAAAAAGTTTTTAATTT
GATGCCCAATATATCTGACCGTTAAAAAATCTTGTTTCATATGGGAGAAGGGGGAGTAATGACTTGTACAAACA
GIATTTCTGGTGTATATTTTAATGTTTTTAAAAAGAGTAATTTCAATTTAAATATCTGTTATTCAAATTTGATGAT
GTTAAATGTAATATAATGTATTTTCTTTTTATTTTGCACCTCTGTAATTGCACCTTTTAAAGTTTGAAGCCATTT
TGGTAAACGGTTTTTTATTAAGATGCTATGGAACATAAAGTTGTATTGCATGCAATTTGAAGTAACTTATTTGAC
TATGAATGTTATCGGAATTACTGAATTGTATCAATTTGTTTGTGTTCAATATCAGCTTTGATAAATGTGTACCTTA
AGATATTGAAGGAGAAAAATAGATAATTTACAAGATATTATTAATTTTATTTATTTTCTTGGGAATTGAAAAAA
ATTGAATAAATAAAAAATGCATTGAACATCTTGCATTCAAAATCTTCACTGAC

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CCCGCGAGCGGACGCGCGACGCCCTCTGTCTCGCTTTTCTATTATTTCCCCCTTTCCCTTTCTTTTTTTT
TTTCTTTTCTTTTCTCCCTTCCCCCTTTACCAATTTCCCTCGGAGCGCTTTCCCCGGGACGGGGACGAGCC
GGTCTACCCCCCGGCTCTCCCCGGCCCCGCGCCCTATGGGAGAGGGAGCCCTTCCCAACCCGGGCTCGAG
CGCGCGGCGCTCTCAGCGCCGGGGTTCATATGGAATAATTCTGCTGACCCAGCCGCGCGCGCGAGTGTGCTCC
CTCGAGCGCCAGCGCCCGCGCGCCGCCGCCCTGATCCGCTTCCCTTTCTCCCTCTCAGTTGGCGAGTGTCC
CCGCGCGACCGCCTCCGCGCGCCTATGAGAAATGAGGTGTTAACGGGCCCCGGATGACCCCGCTCACCACGT
GAGGCTCACACCTCTCGCCGGGAGAGGAGGAGGAGGAGGAGGAGGAGTACTGCTACGAAAGCTGGGTAGCA
CGAGATTCACAAAGATACTAATGAATTTTCAGGGCTTTGGAAAGCCAGAGATGTCTTTCTTGTGGAAGAAGC
AATCATAGGGAAGACAGAGATGTGAAAGTGAATGTGCGGAAATGCCTCAAATCAGAAATGTTTCTCATCCCA
GAGAGATGAAGTAATTCATGTGCGCCAACTCAAGTACCAATCAACCTTTACCCAGAAACATTTGCTCTGCG
TAGAGCTTTTGGTAGAGTTTATAGCTACGTAAGGCTACATCCAAATCTGAGTGTATTTGCAATCAGTGT
TTTTTCTTACTGCTCGCAAGACTGTTGAGGAAGATAGAGAAATCCGATCTCAAAGTATGGCAGAGACAGATTT
CTTGATGATGTTCCCTATCTGAAATTTGAGAAATGAGGAATAATTTCTGGATAGGTGAATGGGATCTCACA
AGCCACACCATTTGGAATTTCTTCATATTTCCATGCCATTGCAAGTGTCAACTAGGCCTCAGTTACTTTTCAGTT
TCCCAATTTGAGCCCTCTCAACATTTGGGACCTCTTACCAAGCACTACTTCATGTATGGCCCTGCAACCAACT
TGCTCAATTCAGGAGTCACTGCTGTCTGTGCCATGTGTAGTCTGGAATGGAGAAACTCTTCTGATTGGCT
TTCTCTTACAAATGAACCTGTTTCAGAAAGACAGATGGATAGTCCGAGTGATCTCATGTGCGGAGCTGTGGC
ACATCACTTCTACTCTGCACTCTCCCTGCTTCAATTCGTTTATGTCTACCGTCCCTCAAGCAACACTCT
GGTGACCTGTGACAAAGGAGTGTTCAGATATACATCCCTCTCTGTGCCAGGCCCCAGACTTCTCCAAGGACAACG
CAAGCCAGAAAGTCCGCTCAGAGGTACAGACGCTTTTACCATCTCTCCAGTCCGAGTGGCAGTGGTCAAGCAGAC
CTCTACTAACCGAAAGTACAGAGAAATGGAAGTGGAATCACTCTATGATGGAATCAACGGCTCTATAATGAAGA
TAATGTTCTCAGAAATATGGGTTCTGTGTGTGCACTGATTTATCAAGACAAGAGGACATGCTTCCCTTGTCC
ACCTTTGACGCGCTGTTCTGTCACTGATGATCAACAAAGTCTACCTTTGAGTGTAAACTAGGTAGACTTTG
GGAATTGAGAAATGCAAAATCAGAAAGGCTGTGAGAGGAAATATACCTTAACAGGCTGATTTGGAGTGAGCCAC
AAAAAAAAAAAAAAATCTCTATTATTTGTGTGGCTAATTATAATTACGCGTTATTAAGCACATAAGACCAA
AAAAAAAAAAAAAAAA

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FIGURE 1450

MKFPGPLENQRLSFLEKAITREAQMWKVNVRKMPSNQNVSPSQRDEVIQWLAKLKYQFNLYPETFALASSLLDR
FLATVKAHPKYLSCIAISCFFLAAKTVEEDERIPVLKVLARDSFCGCSSEILRMERIILOKLNWDLHTATPLDF
LHIFHAIIVSTRPQLLFSLPKLSPSQHLAVLTKQLLHCMACNQLLQFRGSMALAMVSLEMEKLIPDWLSLTIEL
LQKAQMDSSQLIHCRELVAAHHLSTLQSSLP LNSVYVYRPLKHTLVTCDKGVFRLHPSSVPGPDFSKDNSKFEVPV
RGTAIFYHHLPAASGCKQTSTKRKVEEMEVD DFDGIKRLYNEDNVSENVGVCCTDLSRQEGHASPCPLQFVS
VM

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CCTGGACTCAGAGCTCAAGTCTGAACTCTACCTCAGACAGAATGAAGTTCATCTCGACATCTCTGCTTCTCATG
 CTGCTGGTTCAGACGCTCTCTCCAGCTCAAGGTGTCTGGAGGATTTATACACAGATCTGGAGTGTAGATGTGCTC
 CAAGAGAGCTCAGTCTTTATCTCCAGTACGCTTCATTGATCGAAATCAAACTTGCCCGCTGGGAATGGTGTCCA
 AGAAAAAGAAATCATAGTCTGGAAGAAGAACCTCAAGTCAATGTGTGTGGGACCTCAAGCTGAATGGATCAAAAGA
 ATGATGGAAGATTTGAGAAAAGAAGTTCTTCAACTCTACCGTTCAGTGTTTAAGAGAAAGATTCCTGATGCG
 TGATATTTCCCTAAGAAGACCTGCATGATTTCTCCCTATCTCCCTGCTGTGATTTAGTTTGTGCTTAGTTAAATC
 TTTTCCAGGAAGAAAGAACTTCCCTACAACAAATGAGATGAGACATGTAAAAATAAATCTTCGAGAAGTGAATGGG
 GCAAACTCAAGCTTCTCCTCAGCAGCCATATATACACTTGGAGTTGCATTTATTCATCCAGGAGAGGAAGG
 TTTCTTTGAAAAATAGTTATTCAAGTTATAAGTAATACAGGATATTTTTGATTATATACTTGTGTTTAAATGTTTAA
 AATTTCTTAGAAAACAAATGGATGAGAATTTAGCTCTCAATTTGAACATGTGGCTTGAATTAAGAAGAAATTA
 TGGCATATATTTAAAGAGGCTTCTATGAAGAGCTCAAAAGCTCGTGGGAGGCGATGGAACCTTGAGCTTGAGCTGTG
 AAGAGCAAAAGGAATCCATGTAGTAGTACTCTGCTGTCTGCTTAAAAAATCAGTACGGAGAGAAATTAAGTCTACTTT
 TAAAAAGAAATTTCTTTAAAAAATTTAGTGTCTAAGTAATAGCATTCGAAGATCCCGAGCTCATAGATACTCA
 GGGAAAGCATTTAAAGGGGTGATGTACACATGATCTCTTTCACACATTTGCCCTTGACAACTCTTTCACTCACAT
 CTTTTTCACATCTTTTCTTTGTGGGGCGGGCGGGGGGACTCTGGTATCTAATTTTAAATGATTCCTATAA
 ACTAATGACATTCATAAAGTTGAGCAAAATTTTACTT

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FIGURE 1452

ATGGTTTATCAGACATCACTTTGTTCTTGTCTGTAAACATCCGAGTGCCCAACAGACATTTTGCTGCTGTACA
AAGTCTGCAAGAAAAACAAAAAGGTGCTAAAGAAAAACACCAGATGAGAAAAAGATGAAATAGAAAAATA
AAAGCATATCCCTATATGGAAGGCGAACCTGAGGATGATGTCTATTAAACGCTTATACCCGAGACAGATATAT
GAGGTGGAGAAAGCTGTTCACTTACTTAAGAAATTTCAAATTCCTGACTTTACTAGTCCAAAGCAAAGTGTATT
CTTGATTGACACTGGATATGGCACTGGGAAAGAGAAAAACGTGGAGCCATTTACCAGTGTCTTAGTTTGCCA
TACCCATTGCTTCCGAAATCAATAAAGTTGCTGTATTTACAGAGAATGCATCAGAGGTCAAAATAGCGGAAGAA
AATGGAGCTGCATTTGCAGGAGGCACTAGTCTGTATACAGAAGATTGGGATGATGAAATTGTTGCAGACTTTTAC
GTAGCTGTTCCAGAAATAATGCCTGAACCTTAATCGATTAAAGGAAGAACTGAATAAAAAATATCCAAAGCTTTCT
CGAAATTCCATTGGCCGTGACATCCCCAAATGCTTGAATTATTTAAAAATGGACATGAAATTAAGGTAGATGAA
GAAAGGGAGAACTTTCTCCAGACCAAAATAGCAACATTGGATATGTCAAGTGACCAGATAGCTGCCAATCTGCAA
GCAGTTATTAATGAAGTTTGTAGGCACAGACCGCTGAATTTGGGTCCCTTTGTGGTACGTGCTTTCCTTCGTAGT
TCAACAAAGTGAAGTTTATTACTGAAGATTGATCCATTGTTGCCATAAGAAAGTAAAAAATGAAGAAAGTGAAAAA
GAAGATGCCTAA

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FIGURE 1453

GTGGGAAGAGCTGAAGCAGGCGCTCTTGGCTCGGCGGGCCCGCTGCAATCCGTAGAGGAACCCGCCGCCGAGCC
ACCATCATGCGCTGGGCACTTACAGGAAGGCTTCGGCTGTGTGGTCACCAACCGATTTCGACCAAGTTATTTGACGAC
GAATCGGACCCCTTCGAGGTGCTGAAGGCAGCGGAGAACAGAAAAAGAACCGGCAGGGGTGGCTTGGGGGC
CCTGGGGCCAAGAGCGCAGCTCAGGCGGGGCCAGACCAACTCCAACGCGGCAGGCAACAGCTGCGCAAGGAG
TCCCAAGAAAGCCGCAAGAACCCGCTGCCCGCAGCGTTGGCGTGGTTGACAAGAAAGAGGAGACGACGCGGCC
GTGGCGCTTAAGAAAGAAGGAATAAGACGAGTTGGAAGAAGACCTGATCAACAACCTTCAGGGTGAGGGGAAAAATA
ATTGATAGAAGACCAGAAAGGCAACCACTTGTGAACGAAGATTCGAAAGGCCACTTGAAGAAAAGGGTGAAGGA
GGCTAATTTTTCAGTTGATAGACCGATTATTGACCGACCTATTGAGGTGCTGGTGGTCTTGGAAGAGGTGAGGG
GGCGGTGGACGTGGAATGGGCCGAGGAGATGGATTTGATTCTCGTGGCAAACGTGAATTTGATAGGCATAGTGGA
AGTGATAGATCTCTTTTTACATTACAGTGGCTGAAGCACGAGGACAAACGTGGAGGTAGCGGATCTACAAC
TGGGGAACGTCAAAGACGAATTAACGTACTTGGATCAATCAAATGTGACTGACGAAACACCTGAAGGTGAAGAA
CATCATCCAAGTGGCAGCACTGAAAAAAGGAGAATGATGTTGAAGAGGTAAAAGAGGAGGGTCCAAAAAGAGATG
ACTTTGGATGAGTGGAAAGGCTATTCAAATAAGGACCGGGCAAAAAGTAGAATTTAATATCTGAAAACCAAATGAA
GGTGCTGATGGGCAGTGGAAAGAAGGGATTGTTTTCATAAATCAAAGAGTGAAGAGGCTTATGCTGAGGATTGAG
TTATGGACCATCATTTCCAGAAGCCAGCAAATGATATAACGTCTCAGCTGGAGATCAATTTTGGAGACCTTGGCC
GCCCAGGACGTGGCGGCAGGGGAGGACAAAGTGGACATGGGCGTGGTGGGCGCCCAACCGTGGCAGCAGGACCG
ACAAGTCAAGTACTTCTGCTCCTGATGTGGATGACCCAGAGGCATTCCCAAGTTCTGGCTTAAGTGGATGCCATAA
GACAACCCCTGGTTCTCTGTAACCCCTTCTGTTCAAAGCTTTTGCATGCTTAAGGATTCCAAATGACAATTTAA
AAAAAAAAGACTGTCAATTCATACCATTCACACCTAAAGACTGAATTTTATCTGTTTCAAAAATGAACCTATCT
CGCTACACAGAAGTAACAAATATGGTAGTCAGTTTTGTATTTAGAAATGATTTGGTAGCAGGGATGTTTTATAA
TTTTAGAGATTATGCATTCTTCATGAATACTTTGTATTGCTGCTTGCAAAATATGCATTTCCAAACCTGGAATA
TAGGTGTGAACAGTGTGACCAAGTTTAAAGCTTTCACCTTCATTGTTGTTTTTAATTAAGGATTTAGAAAGTCCC
CAAATTACAAACTGGTTTTAAATATTGGACATACTGGCTTTAATACATGCTTTGCATATTACACATGATCAACT
GGGACATGTTAAACTTTGATTTGTCAAATTTTATTCTGTGTGGAATACTAACTATATGATTTTAACTTAGTTTT
AATATTTTCATTTTGGGGAAAAATCTTTTTCACTTCTCATGATAGCTGTTATATATATATGCTAAATCTTTAT
ATACAGAAATATCAGTACTTGAAGAA

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FIGURE 1454

MPGHLQEGFGCVVTNRFDQLFDDSDPFEVLKAAENKKKEAGRGGVGGPGAKSAAQAAAQTSNAAAGQLRKESQ
KDRKNPLPRSVGVVDKKEETQPPVALKKEGIRRVGRRPDQQLQEGEKIIDRRPERQPPCERRFEKPLEEKGEGG

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FIGURE 1455

AGACGCAGTCTCCGTCGTTGACGTTAGTCGCGAGTCTTCGCTGCTAACGTTTTTGTATGAGTIGCTAAAAATGGTGA
AATGCTGCTCCGCCATTGGATGTGCTTCTCGCTGCTTGCCAAATTCGAAGTTAAAAGGACTGACATTTACGSTAT
TCCCACAGATGAAAAATCATAAAGGAAATGGGTATTAGCAATGAAAAGACTTGATGTGAATGCAGCCGGCATT
GGGAGCCTAAAAAAGGAGATGTGTTGTGTTCCGAGGCATTTAAGAAGACAGATTTTGACAGAAGTGCTCCAAATA
TTAAACTGAAACCTGGAGTCATACCTTCTATCTTTGATTCTCCATATCACCTACAGGGGAAAAAGAGAAAACTTC
ATTGTAGAAAAAATCTCACCTCAAACCGTTCCAGCCACTAACTACAATCACCATCTTGTGGTGCTTCCTCAT
GTATTGAAGAATCCAATCCAGTTTCAATTTTGAACATAGCTACAGTGAATGGACAGTCCAAAGAACTTAAGC
ATAAAATTAGATCATGTGATCGCGAGCTAGAGGATACAAAGGAAAGCTACGGGAATGTTTAGACCGAGAAAAAC
GTTTTAGAAAATCATTTAGGAGAACAAATCAGGGAATTAAGGATGAATGCTGTGATCAGCCAAAGAAACAGCAAAATA
GACTGGACACTTTCTGTTGGGACTGTTGTCAGGAGAGCATAGAAACAGGACTATATTTTCATGAAATAATTTTCATGT
TACGTTCCACCTAAAATTTGTCATTGGTACAAATTTTATAAAATCTCATTACCATCCTAAATAATATCCATCA
TTTAAAGTGCTGCTTTGGATTCTCTGAGCATTATGCAATTATAGTTGTTATCCAAAGACTTTTTGAAAAATATGC
AGAAATTTGTGGTAATTATGTAATTTGTGCTTTGTGCAAAATATGTTTATAGACCTACACTAGTGCCAGGTCACT
ATTGTAAGATGTTAAAAATCTCAAAGAAATTTACAGAGCTAAAAGAAATGATGTCAAATTAGTCACATTAAAGCTAT
AGTAGAAGGAATTTGGACATTTCTCCAGATATTTGGCTTCAAAGGAGTACCTTTACTTACATGTGCTTTATGGTAA
GTACATTTGAATTTTACTTTAAATGCATTTTACTACAAAGCACAAATTCATTGTAATGCATCCATCTTGGATT
AATCCAAGGTGCTTTAGCTATCAGTAGTACCAAAGGATCTTTTACAAGGCTTCTGTGGTATGTAGCTTGAGAA
TAACACATAGTGAAGATCTGTGGGCTTTTAAATTTGTCACAGCCAAATTAAGAAGACCCCTCATGAAGTCTCAG
TTTTAGTACAGTACATCATTCTCTCCTCCTAGGAGCATTGTATGTAACCAGATAGCTTTTAAAAGACAAAA
AGGATCTGATAGTCTGATTTTTAAATGGTTGGTTGCTCTGACAGATCTGAAACACTTTGCTTCATGACTATTTTCGTC
ATAAAGGTATATGTTTAAATCTGAATGGCAGTACTAGCTCTATACCTTTAACTAGCTTTGATTTTTATATGTA
AAGTAGTATTGCTGACATTTTAAAAAATACAAAATACAAAGAAACCATTAGAAATTAATAACTGTGGCTCTTC
CAGTTGAAATAGGAATTTGGAGAGAAAGGATTAGAATATTTTAAATAGGGGAGTAGATTATGTCCAAAGGCTTT
ATTAGAGAAACGGGTAATTAACACAGCAGCTTAGAATAGCTTCTTACTGAATATGCAAAAGAAATTAATCTCTG
TTATTCTCTAATGTATCCAAGTCTCATAAATTTAGCTTTTGTGATAATTCCTTACCGAAAAACACTGAAATGTAG
AGTCATAAATACTGTGGGTAGGAATAAAAAACCAATTTGCCAAAGCAACACTCTACTTAGAAGCACATGTACATACA
TGGACCTCATTAGAAAGTCCATGTTGTAGCAGTTAGAATTTGAGTATCAGCCATTTCTTGTAGTAAACAAAAT
GAATGTCATTTTGTGCTCAGTTGTTTATTGTAATTTTATTTTGTGTACATTAATATAGTTAAGATATGGTCACT
TGAATTTTTTGTATTTAAGAAATTTCTGTTTAAATGCATGTTATCTTTTATGTAGGATTCCAAAGCTTCCCTCT
AAATGGGATTTAAACCCACATCTGCGAGATCAGCGTTATGCTAAGAGGAAATCACTGAGGCCATATCTTTTACAA
TCTGAAAAAAGTAGTAAAAAGGTAGTTAAAAAATTTT

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FIGURE 1456

CGGCGCCATTAAAGCAGGAGGAGGCGAGAGCGGCCGCCGCTGGTGCTTATTCTTTTTAGTGCAGCGGGAGAGA
GCGGGAGTGTGCGCCGCGCGAGAGTGGGAGGCGAAGGGGGCAGGCCAGGGAGAGGCGCAGGAGCCTTTGCAAGCCA
CGCGCGCGCCTTCCCTGCTTTGTGTGCTTCGCGAGGTAGAGCGGGCGCGCGCAGCGCGGGGATTACTTTTGCTG
CTAGTTTTCGGTTCGCGGCGAGCGCGGGGTGTAGTCTCGGCGGCGAGCGCGGAGACACTAGCACTATGTCTGGAGGAG
CAGTTCTGGCGGGGACGGGGCGCGCGCAGCGGCAACGGCGGCGGTAGGCGGGCTCGGCGGGCGAGCAGGAGGAGCC
ATGGTGGCGGCGACACAGGGGGCAGCGCGGCGCGGGGAAGCGGAGCCGGGACCGGGGGCGGAACCGGCTCTGGA
GGCACCGAAGGGGGCAGCGCGAGTCGGAGGGGGCGAAGATTGACGCCAGTAAGAACGAGGAGGATGAAGGCCAT
TCAAACCTCCTCCCCACGACACTCTGAAGCAGCGACGCGCACAGCGGGAAGAATGGAATAATGTTATAGGAGGCCCT
AGCTGGGACACTACAAAGAAAGATCTGAAGGACTACTTTTCCAAATTTGGTGAAGTTGTAGACTGCACCTCTGAAG
TTAGATCCTATCACAGGGCGATCAAGGGGTTTTGGCTTTGTGCTATTTAAAGAAATCGGAGATGTAGATAAGGTC
ATGGATCAAAAAGAACATAAATTGAATGGGAAGGTGATTGATCCTAAAGGGCCAAAGCCATGAAAACAAAAGAG
CGGGTTAAAAAAATTTTTGTTGGTGGCTTTCTCCAGATACACCTGAAGAGAAAAATAAGGGAGTACTTTGGTGGT
TTTGGTGAGGTGGAATCCATAGAGCTCCCCATGSAACAAGACCAATAAGAGCGGTGGGTTCTGCTTTATTACC
TTTAAGGAAGAAGAACCAAGTAAGAAGATAATGGAAAAGAAATACCAATGTTGGTCTTAGTAAATGTGAATA
AAAGTAGCCATGTCAAGGAACAATATCAGCAACAGCAACAGTGGGATCTAGAGGAGGATTTGCAGGAAGAGCT
CGTGGAAAGAGTGGTGACGACGAGTGGTTATGGGAAGGTATCCAGGCGAGGTGGTCATCAAAATAGCTACAAA
CCATACTAAATTTATCCATTTGCAACTTATCCCCAAGGTGGTGAAGCAGTATTTCCAATTTGAAGATTCAAT
TGAAGGTGGCTCCTGCCACCTGCTAATAGCAGTTCAAACTAAATTTTTGTATCAAGTCCCTGAATGGAAGTATG
ACGTTGGGTCCCTCTGAAGTTTAATCTGAGTTCTATTAAAGAAATTTGCTTTCATTGTTTTATTCTTAAT
GCTATGCTTCAGAAATCAATTTGTGTTTTATGCCCTTTCCCCCAGTATTGTAGAGCAAGTCTTGTGTTAAAGCCCC
AGTGTCACAGTGTCAATGTAGTAGTGCTTACTGGTTTTTTAATAAATCCTTTGTATAAAATGTAATGGCT
CTTTTATCATCAGAATAGGAAAAATGTCAATGGATTCAAGTTATTAAGCATAAGTTTGAAGACAGGCTTGCC
GAAATGAGGACATGATTAAAAATTGCAAGTGAAGTTTGAATGTTTTAGCAAAATCTAATTTTGGCATAATGTG
TCCTCCCTGTCCAAATTGGGAATGACTTAATGTCAATTTGTTGTGGTTGTTTTAAATAACTTCTTATGTAG
CCATTAAGATTATATGAATATTTCCCAATGCCAGTTTTGCTTAATATGATTGTGCTTTTAGAACAAT
CTGGATAAATGTGCAAAAGTACCCCTTTGCACAGATAGTTAATGTTTTATGCTTCCATTAATAAAAGGACTTA
AAATCTGTTAATTATAATAGAAATGCGGCTAGTTCAGAGAGATTTTAGACCTGTGGTGGACTTCATAGATGAAT
TCAAGTGTGAGGGAGGATTAAGAAAT

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GACGAGCGCTGCACTAACCGAGGATCCGGCTCCGGAAGGTCTCTGCCAGCAGGATATGAAGTTAAAGGAAGTAGATT
 TGACAGCATCGAGCATGGAGCTCTCCGCAGGATACCCCAATTACCTAGCAACAGGAACATCTGCTCAGCAAT
 TGGATGCAACATTTAGTACAGATGCTTCCCTTGATATTTGAATTAGACTCTCTGATCCATCTTGGATATGA
 AATCTTTGTGCCACATTTCTCTCTTTCTCACAGGTAACCAAGTGTATTTGGGGGCTTATAAATGGATTCCAAG
 GAGATGCTCTTGGAGTTCTGATTGCAAGTGAGTGAATAATATTCCTATGATCTCTCAAATTTATAG
 CTGGAGACAAGAGATTTGTGATTGCCAGATGACAAGCACTAGTGCCCACTGAGAGCCTTTGATGTGAACATTT
 TCCAGACATCTCTGTAAGCTTTCTGCTGCTATGAATCTGAAATACATATGGGATCTAAATATTTTGCACACC
 CAAATGACACCAAGGACCAAAACACAGCCGCCAGAAGATACAGCTGCATTGACTGGAACAGACAAGTTCAGCATAT
 TTTTAGATTCAGCCAGTCCGAGTGCCCGGGCCACTGATGGGATCTTAGAAAAATGAGCCAATCATCAAGTCT
 GTGACCATAGTAAACAAGATGCATTTCTGCTGGGTTGGCATGCTGATGTTGCTCATAGATGGTCTTGCTCT
 CCGAGGATGACCGGTTAGCAGGATTCAGATGAGTGGGATTCGATTGCTCTCTCCACTCGTGTCTGGAACTG
 ACCATGCCAGGGGGATTTGGCAATTCGTTGGAGCATGGCAGATCTGAAATGTTACTGAGCTGTGGAAAGTGTGCT
 CTAAGATTTCTGCTCTCAATCCAAACACAGGAGAGGTGTTATGAACTTCCCAACACACAGATGAGTGTCTG
 ATATTCAGTGGTCTCTCGGCAATCTCTGCTTCTATACAGTCTGTTGTTGATGGGCTATCAGTGTTTATTTCTA
 TCACTGGGAGAGGACAGACATGCTTTAAGACAGAAACAAGTTGACAAGGTTTCATCATCTTTGGGAATCTTGATC
 CTTTGGGACAGGACAGCCCTTCTCTCGTTACAAATCCACGACGACTGTACGATAGTATAGTCTGCGCTCT
 TGAAGAAGCGCCCAAGTGGATTGGAAGGCTGTTGGTGCTTCTTTTTCATTGGAGGCAATCGTTGATCGTTTG
 AGAATGTCAGATAGGCTTCTCATACAGGAGCTGAGCAGACAGCAGCAGCAGCATGTTGTTATTAGTCAGGTTG
 TAACAGAAAAGAGGTTCTCAGCGCATCAGACCAACTACGACGGCTGTGCGATCAGCAAGGATTATCAATTTAT
 GCCAAAAAAATATGATGCTCTCAGACTGAAATTTGAGAAAAATGTGTGGCTCTTTTGAAGTAAACTTTGAGG
 ATGATTTCTGTTGAAAATATCTTGAATCTTAGGATACAGAAAAGATCTAGAAAAGAAGTTGCTTTGGCTCT
 TGAACAAGTGGTGGAGCAACTGTGGCTCTTAAAGACTTGACCAATGACAGATGACAGAGTGATGGGGAGGAGACC
 CTGCTGCTGAAGGACGCTCTTTGGGAGACACATTAAGAGGAAAAAGAAATCTGAAATTTACCTCTCATCTG
 CAGGAACATTTAATATCTCTCTGACGTGGGACATGATGGTTTAATTACTAGGCTTTGCTGCGGGCAATTTTG
 AGAGTGCTGTTGACCTTTGTTTACATGATAACCGCATGBCGATGCCATTATATTGGCCATAGACGCTGGACACG
 AACCTTTGGCTCGAAGCGGACAAAAATCTTCGAAATCCCAAGACAAATATACCGGCTCATCTGTCAGTGG
 TGTAGAAGATCGTGAAGAGAGATTGTGATGCTTGATCTATAAAATGGAGAGAGGTTAGTCTGAGTATGGA
 CTTATGAAGACCGGATGAATTTCTCAGCCCTTTGTGATCTTTGGGAACACGGCTGAAAATGAAGGATAGGCC
 TCTCTGCAGACTCAGCATGTCTCTGCTATATTGTGCAGGGAATGAGAAAAATTGTTGATGTTGGATACAGC
 CTCAAGATGGAAGGACCCCTTTGTGACTTCAGATCTGATTGAGAAAAGTTGTCACTCTCGGAAAAGCTGTGCAAC
 TCACTCAGCATAGGACATGACTAGCTGTAGAGGTTCTTGTGCTGGAAGATGAGTCAGTATGCCAATTTGTGG
 CAGCTCAGGGCAGTATTGTCGACAGCTTGGCTTTCTCTCGGACACCAACGAGCAAAATATCAGCATCTCT
 GTGACAGACTTTGTAGAGCACAAGGAGAGCCTGTAGCAGGACATGAATCAGCTAAATTTCCGTACGAGAATAGC
 AGCTCCCAAGGAGGACGCTGTGACCAAGTTGCTGGCCACCACAGTGCCAAAGTTCAAAGTCAACATATATG
 CCGATGGAAAAATCTCTCACTCCGGGTTCTAATATGCATGGAATTTGATTCAAATGCTTCTGTCAGCTCT
 CCACATCTCTCAGGTCATATGCACCAAGTAGTACCACCTATTCACGACGACAGCCTATCAACCCGCCCGCGCT
 ATCCTCTCGGAACAGGGGGTGCAAGTCTGCACTGACCTCAGAGCCTGTGTGCTCTCTACTTCAAAGCTTTACC
 CTAACACCCCTTACATATCTCTGCTTCTCCTATCTAGGCGCTCTCAGCTGTACGACGACAGCACCAGGCTCT
 CTTCACTTACCTCAGCCCTGCTACTCTTCTTCCCTCTCCCCCTCTCTGGAGATCTCTCAGATGTGGCGGAC
 CAGGAGCTCTCACCATCTTGCTATCTATGCACTGCTCTGGAACAAAGATGACTGCTCTGCTGCTGAGTGTG
 TGCTTGCCTCCAAAGAACAGGCTCTCAGAAATGGTTGGAATGACCTCTCAGCTTTTGAACAGAGTACCCAAAAGA
 AGAAGATGCTTGAAAATCTTACGCTCTTGTTCCCATCATACCCAATCATGAACCCCTGGGTGACCCCCGAT
 CACAAGTCTCGACAAACAGCCTCAGCTCGAGTACCACTGCAAGCAGTCTTCAATCCACAGGCACATCTCT
 CAGGTTGGCCAGCCTTCATGGCGCTACAGAACCTCTTGTTCAACAGGCACTGCACCATCTTTTCAAAGCCCA
 ATATTGAAGTTGCCCAAGGGGCTGATTTGGAATACTTTCCAGATCTGAGCTGTTTGGCAACAAAAAAATAT
 CCAAGAAACCTATTCCAGATGACCACTCATTTCAAAGCCACATTTGAGGATCTTATTCAGCGCTGATCTTCTT
 CAGCAACAGACGCTTCAACCAAGGAAGAGTAGATGATGCGCAAGAACTTTGGAGTTCTTGATGTAAATCT
 GGGACAGCACTTTTCCCAACAAATCACCAGTGGTTTACACAAATGCAAGGACATTGAAACTCGAACTACT

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FIGURE 1457B

CAGAAAGGATTGACCATGCATACCCACATAGTTAGCACCAGCAACTTCAGTGAGACCTCTGCTTTCATGCCAGTTC
TCAAAGTTGTTCTCACCAGGCCAATAAGCTGGGTGCT**TAA**AAGGACAGCTTCTCTCCACTCAATATTGCCATT
TTTCCAAAGAAACATGTTAAAAAATAAATTATAAGACATGGACTAGTCCTCATTAGCATGTTGCATAGCAACC
AGTCAAGAGCATTTACACTATTTCTGCTGATATACTCACCTTAGAACTGCTCAGAACCCCTGGTGCTTTATTTTGG
TTTTAATCTTTTGTGCCAGTGATGATTTTCCCTATTCTGCAAAATAGTGATTTTCTGGATTACACATAGTATGGT
TTCTGAAGTATTCTGATAAATGTGTTTTTTTAAACCICAATATACTTTTAAAGGAGCATCTGGTTATGC
ATAAAGCAGAGCTAAACTAAATTTCTTTCATGTCCTCCCTACTTCTCAGTGTCATCAGATTAAAGTGTGTAA
TCCT

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FIGURE 1458

MKLKEVDRTAMQAWSPAQNHPYIYLATGTSAQQLDATFSTNASLEIFELDLSDPSLDMKSCATFSSSHRYHKLIWG
PYKMDSKGDVSGVLIAGGENGINILYDPSKIIAGDKEVVIAQNDKHTGPRALDQVNIQTNLVAGSANESEIYIW
DLNNFATPMTPGAQTQPPEDISCIAWNRRQVQHILASASPSGRATVWDLRKNEPIIKVSDHSNRMHCSGLAWHPDV
ATQMVLAESDDRLPVIQMWDLRFASSPLRVLENHARGILAIAWSMADPELLSCGKDAKILCSNPNTGEVLYELF
TNTQWCFDIQWCPNPAVLSAASFDRISVYSIMGGSTDGLRQKQVDKLS SFGNLDPFGTGQPLPPLQIPQQT
QHSIVLPLKPPKWIRRPVGASFSFGGKLVTFENVRMPSHQGAEEQQQQHHVFISQVUTEKEFLSRSDQLQQAQV
SQGFINYCQKKIDASQTEFEKNVWSFLKVNFEEDSRGKYLELLGYRKEDLGKKIALALNKVDGANVALKDSQVA
QSDGEESPAEEQLLGEHIKEEKEESEFLPSSGGTFNISVSGDIDGLITQALLTGNFESAVDLCCLHNRMDAII
LAIAGGQELLARTQKKYFAKSQSKITRLITAVVMKNWKEIVESCDLKNWREALAAVLTyakPDEFSALCDLLGTR
LENEGDSLLQTAQCLCYICAGNVEKLVAWTKAQDGSHPLSLQDLIEKVILRKAQVLTQAMDTSTVGVLLAAKM
SQYANLLAAQGSIAAALAFDPDNTNQPNIMQLRDLRCRAQGEFVAGHESPKIPEYEQQLPKGRPGPVAGHHQMPR
VQTQQYYPHGENPPPPGFIMHGNVNPNASGQLFTSPGHMHTQVPPYPQPQPYQAPQYFPFGTGGSAMYPQPQV
PPTSNAYPNTPIYISSASSYTQQSQAQHQASSPTSSPATSFPPPPSSGASFQHGPGAPPPSSAYALPPGTTG
TLPAASELPASQRTGPQNGWNDPPALNRVPKKKKMPENFMPPVPIITSPIMNPLGDPQSQMLQQQPSAPVPLSSQS
SFPQPLPGGQPFHGVQQLGQTGMPPSFSKPNIEGAPGAPIGNTFQHVQSLPTKKITKRPIDPEHLILKTTTFED
LIQRCLSSATDPQTKRKLDDASKRLEFLYDKLREQTLSPITITSLGHNIARSIETRNYSEGLTMHTHIVSTSNFSE
TSAFMPVLKVVLTQANKLEV

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FIGURE 1459

GCAGAGCACAGCATCGTCGGGACCAGACTCGTCTCAGGCCAGTTGCAGCCTTCTCAGCCAAACGCCGACCAAGGA
AAACTCACTACCAATGAGAATTGCAGTGATTGCTTTTGCCCTCCTAGGCATCACCTGTGCCATACCAGTTAAACAG
GCTGATTCTGGAAGTTCTGAGGAAAAGCAGCTTTACAACAAATACCCAGATGCTGTGGCCACATGGCTAAACCTT
GACCCATCTCAGAAGCAGAATCTCTAGCCCCACAGACCCCTTCCAAGTAAGTCCAACGAAAGCCATGACCACATG
GATGATATGGATGATGAAGATGATGATGACCATGTGGACAGCCAGGACTCCATTGACTCGAACGACTCTGATGAT
GTAGATGACACTGATGATTCTCACCAGTCTGATGAGTCTCACCATTCTGATGAATCTGATGAACGGTCACTGAT
TTTCCACGGACCTGCCAGCAACCGAAGTTTTCACTCCAGTTGTCGCCACAGTAGACACATATGATGCCGAGGT
GATAGTGTGGTTTATGGACTGAGGTCAAAATCTAAGAAGTTTCGCAGACCTGACATCCAGTACCCTGATGCTACA
GACGAGGACATCACCTCACACATGGAAGCGAGGAGTTGAATGGTGCATACAAGGCCATCCCCGTGCCAGGAC
CTGAACCGCCCTTCTGATTGGGACAGCCGTGGGAAGGACAGTTATGAAACGAGTCAGCTGGATGACCAGAGTGCT
GAAACCCACAGCCACAAGCAGTCCAGATTATATAAGCGGAAGCCAATGATGAGAGCAATGAGCATTCCGATGTG
ATTGATAGTCAGGAACCTTCCAAGTCAGCCGTGAATTCCACAGCCATGAATTTACAGCCATGAAGATATGCTG
GTTGTAGACCCAAAAGTAAGGAAGAAGATAAACACCTGAAATTTTCGTATTTCTCATGAATTAGATAGTGCATCT
TCTGAGGTCAATTAAAGGAGAAAAAATACAATTTCTCACTTTGCAATTTAGTCAAAAGAAAAATGCTTTATAGC
AAAATGAAAGAGAACATGAAATGCTTCTTCTCAGTTTATTGGTTGAATGTGATCTATTTGAGTCTGGAATAA
CTAATGTGTTTGATAATTAGTTTAGTTTGCGCTTCATGGAACTCCCTGAAACTAAAAGCTTCAGGGTTATGT
CTATGTTCAATCTATAGAAGAAATGCAAACTATCACTGTATTTAATATTTGTTATTTCTCATGAATAGAAAT
TATGTAGAAGCAACAAAATACTTTTACCACCTTAAAAAGAGAATATAACATTTTATGTCACATATATCTTTGT
TTTTAAAGTTAGTGATATATTTGTTGATTATCTTTTGTGGTGTGAATAAATCTTTTATCTTGAATGTAATAA
GAATTTGGTGGTGTCAATTGCTTATTTGTTTCCACGGTTGTCCAGCAATTAATAAAACATAACCTTTTACT
GCCTAAAAAAAAAAAAAAAAAAAA

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FIGURE 1460

MRIAVICFCLLGITCAIPVKQADSGSSEEKQLYNKYPD VATWLNPDPSQKQNL LAPQTLPSKS NESHDHMDMD
DEDDDDHVDSQDSIDSNDSDVDVDDTDDSHQSDSHHSDESDELVTDFPTDLPATEVFTPVVPTVDITYDGRGDSVV
YGLRSKSKKFRRPDIQYPDATDEDITSHMESEELNGAYKAIPVAQDLNAPSDWDSRGKDSYETSQQLDDQSAETHS
HKQSRLYKRKANDESNEHSDVIDSQELSKVSREFHSHEFHSHEDMLVVDPKSKEEDKHLKFRISHELD SASSEVN

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FIGURE 1461

CTCCAGCACAGCGTTGGTGCTGCCTGGGTATCAGAAAGCAAGCTCACATTGCTCTCCAGTACGTGTAAGCCTTTT
CTTTTCAAGATGCCTGAGGAAGTGCACCATGGAGAGGAGGTTGGAGACTTTGCCTTTCAGGCGAGAAATTGCC
CAACTCATATCCCTCATCATCAATACCTTCTATTCCAACGAGGAGATTTCCTTCAGGAGTTGATCTCTAATGCT
TCTGATGCCCTGGACAAGATTGCTATGAGAGCCTGACAGACCCTTCAAAGTTGGACAGTGGTAAAGAGCTGAAA
ATTGACATCATCCCCAACCCCTCAGGAACGTACCCCTGGCTTTGGTAGACACAGGCATTGGCATGACCAAAGCTGAT
CTCATAAATAAATTGAGAACCATTGCCAAGTCTGGTACTAAAGCATGCATGAGAGCTCTTCAGGCTGGTGACAGAC
ATCTCCATGATTGGGCAGTTTGGTGTGGCTTTTTTCTGCCTACCTGGTGGCAGAGAACTGGTTGTGATCACAA
AGCACAACGATGATGAACAGTATGCTTGGAGTCTTCTGCTGGAGGTTCCCTCACTGTGCATGCTGATCATGGTG
AGCCCATTTGGCAGGGGTACCAAAGTGATCCTCCATCTTAAAGAAGATCAGACAGAGTACTAGAAAGAGAGGCGGG
TCAAAGAAGTAGTGAAGAAGCATTTCTCAGTTCATAGGCTATCCCATCACCCCTTTATTTGGAGAAGGAACAAGACA
AGGAAATTATGATGATGAGGCAGAAGAAGAGAAAGGTGAGAAAGAAGGGAAGATAAAGATGACGAAGAAAAGC
CCAAGATCAAAGATGTGGGTTTCAGATGAGGAGGATGACAGCAGTAAGGATAAGAAGAAGAAAACCTAAGAAGATCA
AAGAGAAATACATTGACTAGGAAGAACTAAACAAGACCAAGCCTATTTGGACCAGAAACCATGATGACATCACCC
AAGAGGAGTATGGAGAATTCTATAAGAGCCTCACCAGTGACTGGGAAGACCATTGGCAGTCAAGCACTTTTTCTG
TAGAAGGTGAGTTGGAATTTCAGGGCATTGCTATTAGTCTCTGCTGGGCTCCCTTTGACCTTTTGAACAAGA
AGAAAAAGAACAAACATCAAACCTGTATGTCGCGCGTGTGTTTCATCATGGACAGCTGTGATGAGTTGATACCGAGT
ATCTCAATTTTATCATGGTGTGGTTGACTCTGAGGATCTCGCCCTGAAACATCTCCCGAGAAATGCTCCACGACA
GCAAAATCTTGAAAGTCAATCGCAAAAACATTGTTAAGAAGTGCCCTTGAGCTCTTCTCTGAGCTGGCAGGAAGACA
AGGAGATTATAAGAAATTCATAGAGCATTCTTAAAAATCTCAAGCTTGGAAATCCAGGAAGACTCCACTAACCG
CCACCGCCTGCTGAGCTGCTGCGCTGTACACCTCCAGTCTGGAGATGAGATGACATCTCTGTCGTAGTAGTGT
TTCTCACAATGAAGGAGACACAGAAGTCCACCTATTACATCACTGGTGAGAGCAAGAGCAGGTGGCCAACTCTGCTG
TTTTGTGGAGCGAGTGGGAAACAGGGCTTCGAGGTGGTATATAGTACTGAGCCCATTGACAGGATCTGTGTGCA
GCAGCTCAAGGAGTTTGATGGGAAAAGCCTGGTCTCAGTTACCAAGGAGGTTCTGGAGCTACCTGAGGATGAGGA
GGAGAAGAAGAAGATGGAAGAAAGCAAGGAAAAGTTTGAACCTCTGCAAGCTCATGAAGAAATCTTAGATAA
GAAGGTTGAGAAGGTGACAATCTCCAATAGACTTGTGCTTCACCCCTGCTGCATTGTGACCAGCACTACGGCTG
GACAGCCAATATGGAGCAGATCATGAAGCCAGGCACTTCGGGACAACTCCACCATGGGCTATATGATGGCCAA
AAAGCACTTGAGATCAACCCCGACCACTCATGAGAGCCTGCGGCGAGAAGGCTGAGGCCGACAAGAAATGA
TAAGGCAGTTAAGGACCTGGTGGTGCTGCTGTTTGAACCGCCCTGCTATCTTCGGGCTTTTCCCTTGAGGATCC
CCAGACCACTCCAACCACATCTACCACATGATCAAGCTAGGTCTAGGTACTGATGAAGATGAATGGCAGCAGA
GGAACCCAGTGATGAGTTCTGATGAGATCCCCCTCTTGAAGGTTGATGAGGATGCGTCTCGCATGGAAGAAGT
CGATTAGGAGTTTCATGTTGGAAACCTTGTGCCCTTGATAGTGTCCCATAGGCTCCACTGCAGCCTCGATGTC
CCCTGTCCCACTGGCTGCTGGTGTCTAGTGTTTTTTCCCTCTGCTGCTGCTGTGTTGAAGGCAGGAAACCAAG
GGTGTCAAGCCCACTCCCTCTCTACTCTTGACAGCAGGATGAGTGTGTGATTGTGGTTATTTTATTTTCT
TCATTTTGTCTGAAATTAAAGAAATGAATAAAGAAATATGCGGTTTTTATAC

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FIGURE 1462

MKETQKSTYYITGESKEQVANSASFVERVRKQGFVVYMTPE IDEYCVQQLKEFDGKSLVSVTKEGLELPEDEEEK
KKMEESKEKFENLCKLMKEILDKKVEKVTISNRLVSSPCCIVTSTYGWTANMEQIMKAQALRDNSTMGYMAKKH
LEINPDHPIMETLRQKAEADKNDKAVKDLVLLFETALLSSGFSLEDPQTHSNHIYHMIKLGLTDEDEVAEEP
SDAVPDEIPFLEGDEDA SRMEEVD

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FIGURE 1463

CTCTCAAGTCACTCCAGCACAGCGTTGGTGCTGCCTGGGTATCAGAAAGCAAGCTCACATTGCTCTCCAGTACGT
GTAAGCCTTTTCTTTCAAGATGCCTGAGGAAGTGCACCATGGAGAGGAGGAGGTGGAGACITTTGCCTTTTCAGG
CAGAAATTGCCCAACTCATATCCCTCATCATCAATACCTTCTATTCCAACGAGGAGATTTTCCTTCAGGAGTTGA
TCTCTAATGCTTCTGATGCCTTGGACAAGATTCGCTATGAGAGCCTGACAGACCCCTCAAAGTTGGACAGTGGTA
AAGAGCTGAAAATTGACATCTCCATGATTGGGCAGITTTGGTGTGGCTTTTTTCTGCCCTACCTGGTGGCAGAGAA
ACTGGTTGTGATCACAAAGCACAAACGATGATGAACAGTATGCTTGGGAGTCTTCTGCTGGAGGTTCCCTTCAGTGT
GCATGCTGATCATGTTGAGCCATTGGCAGGGGTACCAAAGTGATCCTCCATCTTAAAGAAGATCAGACAGAGTA
CTTAGAAGAGAGGCGGGTCAAAGAAGTAGTGAAGAAGCAATTCAGTTCATAGGCTATCCCATCACCCCTTTATTT
GGAGAAGGAACAAGACAAGGAATTAGTGATGATGAGGCAGAAAGAGAAAGGTGAGAAAGAAGGAAGATAA
AGATGACGAAGAAAAGCCCAAGATC

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FIGURE 1464

GAGCAGCAGAATTTCAACTCCAGTAGACTTGAATATGCTCTGGGCAAAAGAAGCAGAGCTAACGAGGAAAGGGAT
TTAAAGAGTTTTTCTGGGTGTTTGTCAAACCTTTATTTCCCTGTCTGTGTGTCAGAGGGGATTCAACTTCAATTTT
TCTGCAGTGGCTCTGGGTCCAGCCCTTACTTAAAGATCTGGAAAGCATGAAGACTGGGCTTTTTTCTTATGTC
TCTTGGGAACCTGCAGCTGCAATCCCGACAATGCAAGATTATTATCTGATCATTTCCAAACCAACTGCTGAAACGG
TAGCACTGCACAACATGCAATCCCAAGTTTAAAGGCTGAAGCTGAAGAAATGAAAAGAAACAGCAGTATCCA
CAGAAGCAGTATCCCAACCATAAGGCTGAAAAATCATCAGTACTAAAGTCAAAAGAGGAAAGCCATGAACAGTCAG
CAGAAACAGGGCAAGAGTTTACGCCAAGAGCTGGGATTGAAGGATCAAGAGGACAGTGTGGTCACTTAAGTGTGA
ATTTGGAGTATGCACCAACTGAAGGTACATTGGACATAAAAGAAGATATGAGTGAGCCTCAGGAGAAAAAAGTCT
CAGAGAACACTGATTTTTTGGCTCCTGGTGTTAGTTCCCTTCACAGATTTCAACCAACAAGAAAGTATCACAAAGA
GAGAGGAAAACCAAGAACAACCTAGAAATTTATTCATCATCATCAGTTGAACAGGAGCAGTAAACATAGCCAAAGGCC
TAAGGGATCAAGGAAACCAAGAGCAGGATCCAAATATTTCCAATGGAGAAAGAGGAAAGAAAGAGCCAGGTG
AAGTTGGTACCCACAATGATAACCAAGAAAGAAAGACAGAATTGCCAGGGAGCATGTCTAACAGCAGCAGGAGG
AAGACAATACCCAATCTGATGATATTTTGGAAAGTCTGATCAACCAACTCAAGTAAGCAAGATGCAGGAGGATG
AATTTGATCAGGGTAACCAAGAACCAAGAGATAACTCCAATGCAGAAATGGAAGAGGAAAAATGCATCGAACGTCA
ATAAGCACATTCAGAAACTGAAATGGCAGAGTCAAGAGGGTAAAACTGGCCTAGAAGCTATCAGCAACCCACAAAG
AGACAGAAGAAAAAGACTGTTTCTGAGGCTCTGCTCATGGAACCTACTGATGATGGTAATACCACGCCACGAAATC
ATGGAGTTGATGATGATGGCGATGATGATGGCGATGATGGCGGCACTGATGGCCCCAGGCAAGTCAAAAGTATG
ACTACTTCATCCCAAGCCAGGCCCTTCTGGAGGCCGAGAGAGCTCAATCCATTGCCCTACACCTCAAAATTTGAG
AGCAAGAGAAAAAGTACATGAAATGAAATATAGGTACCACTGAGCCTGGAGAGCACCAAGAGGCCAAGAAAG
CAGAGAACTCATCAATGAGGAGGAAACGCTCAAGTGAAGGCAACATGAGGGTGATGTCTGTGGATTCTTGATGA
GCTTCCAGTGTAAGAGAGGCCACATCTGTAAGGCAGACCAACAGGGAACCTCACTGTGTCTGCCAGGATCCAG
TGACTTGTCTCCACAAACAAACCCCTTGATCAAGTTTGTGGCACTGACAATCAGACCTATGCTAGTTCTCTGTATC
TATTCGCTACTAAATGCAGACTGGAGGGGACCAAAAAGGGGCATCAACTCCAGCTGGATTATTTTGGAGCCTGCA
AATCTATTCTACTTGTACGGACTTTGAAGTGATTGAGTTTCTCTACGGATGAGAGACTGGCTCAAGAAATATCC
TCATGCAGCTTTATGAAGCCAACCTCTGAACACGCTGGTTATCTAAATGAGAAGCAGAGAAAAAAGATCAAGAAAA
TTTACCTGGATGAAAAGAGGCTTTTGGCTGGGGACCATCCCATTTGATCTTCTTAAAGGGACTTTAAGAAAAACT
ACCACATGTATGTGTATCTCTGTCACCTGGCAGTTTATGTGAACCTTGACCAACCCCTATGGATAGAGTCTTGACAC
ATTCTGAACCTTGCTCTCTGCGAGCATCTCTGGTGCCATGGAACACTGCATAACCCGTTCTTTGAGGAGTGTG
ACCCCAACAAGGATAAGCACATCACCTGAAGGAGTGGGGCCACTGCTTTGGAAATTAAGAGAGGACATAGATG
AAAATCTCTTGTTTGAACGAAGATTTTAAAGAACTCAACTTCCAGCATCTCTCTGTCTTAACCACTTTCAGA
AATATATGCAGCTGTGATACTTGTAGATTATATTTAGCAAAATGTTAGCATGATGACAAAGATGAGATGA
TTGCTTGACAACAACTATGCACCAGGTATTAACATTAACTTTGGAACAAAAATGTACAATTAAGTAAAGTCA
ACATATGCAAAATACGTACATTGTGAACAGAAGTTTAATTCATAGTAATTTCACTCTCTGCATTGACTTATGAG
ATAATTAATGATTAAACTATTAAATGATAAAATAATGCATTTGATTGTTCAATATCATGTGCATGCTCAAGAA
AATGGAATGCTACTCTTTTGTGGTTTACGTGTATTATTTTCAATATCTTAATACCCATAAAGAGTCCATAAAA
ATCC

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FIGURE 1465

CTTCGCCGCGTGGATGGCCTATTACATCAATCACCCCTCTCTACACTCCCCCTACCTACGGAGCTCAGCAGGTGAA
ACTGGCGCTCGCCATCTTTGTGATCTGCCAGCTCGGCAACTTCTCCATCCACATGGCCCTGCGGGACCTGCGGCC
CGCTGGGTCCAAGACGCGGAAGATCCCATACCCACCAAGAACCCTTCACGTGGCTCTTCTGCTGGTGTCTTG
CCCCAACTACACCTACGAGGTGGGGTCTTGGATCGGTTTCGCCATCATGACGCAGTGTCTCCAGTGGCCCTGTT
CTCCCTGGTGGGCTTCACCCAGATGACCATCTGGGCCAAGGGCAAGCACCAGCTACCTGAAGGAGTTCGGGA
CTACCCGCCCCCTGCGCATGCCATCATCCCTTCTGCTCTGAGCGCTCACCCTGCTGAGGCTCAGCCCCCTCAA
CCCGGTGGCATTCTGGGGGAGGAGTGGGGCCACAGCTCTCCAGCACCCGGAATAAAGCCCCGCTGCCCCAGTCG
GGA

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FIGURE 1466

GAGGGCGGGCTGTTCCGGGAGGCGCTGGGGCTTGAGGCCGAGAACGGCCCTTGCTGCCACCAACATGAGAGAC
TTTGTACCGTGCCCGTTCTTAGTGCTCGAATGTCCTAACCTGAAGCTGAAGAAGCGCCCTGGTTGCACATGCC
GTCGGCCATGACTGTGTATGCTCTGGTGGTGGTCTTACTTCCTCATCACGGAGGAATAATTTATGATGTTAT
TGTTGAACCTCCAAGTGTCGGTCTATGACTGATGAACATGGGCATCAGAGGCCAGTAGCTTTCTTGGCCTACAG
AGTAAATGGACAATATATTTAGGAAGGACTTGCATCCAGCTTCCTATTTACAATGGGAGGTTTAGGTTTCATAAT
CCTGGACCGATCGAATGCACCAATATCCCAAACTCAATAGATTCTTCTCTGTTTCATTGGATTGCTCTGTGT
CCTATTGAGTTTTTTTCATGGCTAGAGTATTCATGAGAATGAACTGCCGGGCTATCTGATGGGTAGAGTGCCTT
TGAGAAGAAATCAGTGGACTGGAATTTGCTCCTGTCAATGAAGTTTTAAAGGCTGTACCAATCCTCTAATATGA
AATGTGAAAAGAAATGAAGAGCAGCAGTAAAAGAAATATCTAGTAAAAAACAGGAAGCGTATTGAAGCTTGGAC
TAGAATTTCTCTTGGATTAAAGAGACAAAGTTTATCACAGAATTTTTTTCTGCTGGCCTATTGCTATACCAA
TGATGTTGAGTGGCATTTCCTTTTAGTTTTTCATTAAAAATATATCCATATCTACAACATAATATCAAATAAA
GTGATTATTTTTTACAACCTCTTAACATTTTTGGAGATGACATTTCTGATTTTCAGAAATTAACATAAAATCC
AGAAGCAAGATTCCGTAAGCTGAGAAGCTCTGGACAGTTGATCAGCTTTACCTATGGTGCTTTGCCTTTAACTAGA
GTGTGTATGGTAGATTATTTTCAATATGTATGTAAAACTGTTTCTGAACAATAAGATGTATGAACGGAGCAGA
AATAAATACTTTTTCTAATTGCAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1467

METLYRVPFLVLECPNLKLLKKPFWLHMPSTVYALVVVSYFLITGGIIYDVIVEPPSVGSMTDEHGHQRPVAF
AYRVNGQYIMEGLASSFLFTMGGLGFIILDRSNAPNIPKLNRFLLFFIGFVCVLLSFFMARVFMRMKLPGYLMG

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FIGURE 1468

ATGCCCAACTCTCCGAGGAGGTGGCGCGGCGGGGGGACCCGGAACTCTGCGCCACGGACGAGATGATCCCC
TTCAAGGACGAGGGCGATCCTCAGAAGGAAAAGATCTTCGCCGAGATCAGTCATCCCGAAGAGGAAGGCGATTTA
GCTGACATCAAGTCTTCCTTGGTGAACGAGTCTGAAATCATCCCGGCCAGCAACGGACACGAGGTGGCCAGACAA
GCACAAACCTCTCAGGAGCCCTACCACGACAAGGCCAGAGAACACCCCGATGACGGAAAGCATCCAGATGGAGGC
CTCTACAACAAGGGACCCCTCCTACTCGAGTTATTCCGGGTACATAATGATGCCAAATATGAATAACGACCCATAC
ATGICAAATGGATCTCTTCTCCACCCATCCCGAGAACATCAATAAAGTGCCCGTGGTGCAGCCATCCCATGCG
GTCCATCCTCTACCCCCCTCATCACTTACAGTGACGAGCACTTTTCTCCAGGATCACAACCGTCACACATCCCA
TCAGATGTCAACTCCAACAAGGCATGTCCAGACATCCTCCAGCTCCTGATATCCCTACTTTTATCCCTTGTCT
CCGGGTGGTTGGACAGATCACCCACCTCTTGGCTGGCAAGGTCAGCCTGTATATCCCATCACGGGTGGATTTC
AGGCAACCTACCCATCCTCACTGTCTAGTCGACACTTCCATGTCCAGGTTTTCCCATCATATGATTCCCGGTCTT
CCTGGTCCCCACACAACCTGGCATCCCTCATCCAGCTATTGTAACACCTCAGGTCAAACAGGAACATCCCCACACT
GACAGTGACCTAATGCACGTGAAGCCTCAGCATGAACAGAGAAAGGAGCAGGAGCCAAAAGACCTCACATTAAG
AAGCCTCTGAATGCTTTTATGTTATACATGAAAGAAATGAGAGCGAATGTCTGTTGCTGAGTGTACTCTAAAAGAA
AGTGCAGCTATCAACCAATCTTGGCAGAAGGTGGCATGCCCTCTCCCGTGAAGAGCAGGCTAAATATTATGAA
TTAGCACGGAAAGAAAGACAGCTACATATGCAGCTTTATCCAGGCTGGTCTGCAAGAGACAATTATGGTAAGAAA
AAGAAAGAGGAAGAGAGAGAACTACAGGAATCTGCATCAGGTACAGGTCAGAAGATGACAGCTGCCTACATCTGA

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FIGURE 1469

TGGCCACAACACCGACACAGTAGCATTGTGCCAGTTTCTGGTTGGAATGGTGACAACACGCTGGAGCCAAGTGC
TAACATGCCTTGGTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAACACGCTGCTTGAGGC
TCTTGACTGCATCCTACCACCACTCGTCCAACGTACAAGCCCTTGGCCTGCCCTCCAGGATGTCTACAAAAT
TGGTGGTATTGGTACTGTTCCGTGTGGCTGAGTGGAGACTGGTGTTCTCAAACCTGGTATGGTGGTCACCTTTGC
TCCAGTCAACGTTGCAACAGAAGTAAAACTGTTGAAATGCACCATGAAGCAGAAGGCTAAATAAATATTATCCC
TACTACCTGCCACCCCACTGTTAATCAGTGGTGGGAAGAATGCTCAGAACTGTTTGTTTCAATTGGCCATTGAA
GTTTAGTAGTAAAAGACTGGTTAATGATAACAATGCATCATAAACCTTCAGAAGGAAAGGAGAATGTTTTGTGG
ACCACTTTGGTTTTCTTCTTTCATGTGGCAGTTTTAAGTTATTAGTTTTTAAAAATCAGTACTTTTACTGGAA
ACAACTTGACCAAAAAATTGTGCACAGAATTTTGAGACCCATTAAAAAGTTAATGAAAAA

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FIGURE 1470

AAGCCAGAACGAGAAAGGAAAAGACTCATATCAACACTGTGATCATCGGACACGTAGATTCTGGGCAAGTCCACCA
CTACTGGCCATCTGATCTACAAATGCGGTGGCGTCGACAAAAGAACCATCGAAAAATTTGAGAAGGAGGCTGCTG
AGATGGGAAAGTGCTCCTTCAAGTATGCCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACATGGTATCACCA
TTGATATCTCTTTGTGGAAATTTGAGACCAGCAAGTACTATGGGACAATGTGGGCTCAATGTCAAGATGTGTC
TGTC AAGGATGTTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAAGGACCCACCAATGGAAGCAGCTGGCTTCAC
TGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAGTGCTGGCTATGCCCTGTATTGGATTGCCACACGGC
TCACATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGACTGATCGCCATTCTGGTAAAAAGCTGGAAGATGGCCC
TAAATTCITGAAGTCTGGTGATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCGTGATGTTGAGAGCTTCTC
AGACTATCCACCTTTGGTGCGCTTTGCTGTTGATGATATCAGACAGACAGTTGCGGTGGGTGTCATCAAAGCAGT
GGACAAAGAAGGCTGCTGGAGCTGGCAAGGTCACCAAGTCTGCCAGAAAGCTCAGAAGGCTAAATAAATATTATC
CCTA

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FIGURE 1471

AAATTGTTAAGGAAAGTCAGCACTTACATTAAAGAAAATTGGCCACAACACCGACACAGTAGCAITTTGTGCCAGTTT
CTGGTTGGAATGGTGACAACACGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAAGGGATGGAAGTCACCCGTA
AGGATGGCAATGCCAGTGGAAACACGCTGCTTGAGGCTCTTGACTGCATCCTACCACCAACTCGTCCAAC TGACA
AGCCCTTGTGCCTGCCTCTCCAGGATGCTACAAAATTGGTGGTATTGGTACTGTTCTCTGTGGCTGAGTGGAGA
CTGTGTGTTCTAAACCTGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTGCAACAGAAGTAAAACTGTTGAAA
TGCACCATGAAGCTTTGAGTGAAGTTCTTCTCGGGGACAAATGTGGGCTTCAAIGTCAAGAAATGTGCTGTCAAGG
ATGTTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAAGGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGTGCTGGCTATGCCCTGTATTGGATTGCCACACGGCTCACATTG
CATGCAAGTTTGTGAGCTGAAGGAAAAGACTGATCGCCATTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTCT
TCTTTGGTGCCTTTGCTGTTTCAATGATATCAGACAGACAGTTCGCGTGGG

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FIGURE 1472

GTGAACATGGTATCACCATTGATATCTTTTGGGAAATTTGAGACCAGCAAGTACTATGTGACTATCATTGATG
CCCCAGGACACAGAGACCTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGCTTGGATTGTTG
CTGCTGGTTTTGGTGAATTTGAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCAGCCCTTCTGGCTTACA
CACTGGGTGTGAACAACATAATTGTGGTGTAAACAAAATGGATTCCACTGAGCCACCCCTACAGCCATAAGAGAT
ATGAGGAAATTTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTGCCACAACACCGACACAGTAGCATTGTGTC
CAGTTTCTGGTTGGAATGGTGACAACACGCTGGAGCCAAGTGCTAACATGCTTGGTTCAAGGGATGGAAGTCA
CCCGTAAGGATGGCAATGCCAGTGGAAACAGCCTGCCTCTCCAGGATGTCTACAAAATTTGGTGGTATTGGTACTG
TTCTGTGGCTGAGTGGAGACTGGTGTCTCAAACCTGGTATGGTGGTCACTTTGCTCCAGTCAACGTTGCAA
CAGAAGTAAATCTGTTGAAATGCACCATGAAGCTTTGAGTGAAGTTCTCTGGGGACAATGTGGGCTTCAATG
TCAAGAAATGTGCTGTCAAGGATGTTCTGTCGTGGCAACGTTGTCTGGTGACAGCAAAAAGGACCCACCAATGGAAG
CAGCTGGCTTCACTGCTCAGGTGATTATCTGAACCATCCAGGCCAAATAA

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FIGURE 1473

GAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGTGCTCCTCAAGTATGCCTGGGCTCTGGATAAACTGAAA
GCTGAGCGTGAACATGGTATCACCATTGATATCTCTTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATC
ATTGATGCCCCAGGACACAGAGACCTCATCAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCTTG
ATTGTTGCTGCTGGTTTTGGTGAATTTGAAGCTGGTATCTCCAAGAATGGGCAGACCCGAGAGCACGCCCTTCTG
GCTTACACACTGGGTGTGAAACAACATAATTGTTGGTGTAAACAAAATGGATTCCACTGAGCCACCCTACAGCCAT
AAGAGATATGAGGAAATTGTTAAGGAAGTCAGCACTTACATTAAAGAAAATTGGCCACAACCCGACACAGTAGCA
TTTGTGCCAGTTTCTGGTTGGAATGGTGACAACACGCTGGAGCCAAGTGCTAACATGCCTTGGTTCAGGGATGG
AAAGTCACCCGTAAGGATGGCAATGCAGTGGAACACGCTGCTTGAGGCTCTTGACTGCATCCTACCACCAACT
CGTCCAACTGACAAGCCCTTGTGCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTACTGTTCCCTGTT
GGCTGAGTGGAGACTTGGTGTCTCAAACCTGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTGCAACAGAAGTA
AAATCTGTGTCAAGGATGTTCGTCTGGCAACGTTGCTGGTGACAGCAAAAGGAGCCACCAATGGAAGCAGCTG
GCTTCACTGCTCAGGTGATTATCCTG

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FIGURE 1474A

GGTGGTTCGAGAAGCAGCAGTGAAGAGAAGCTACTGTGTTGGTGCGGGAGCGAGCTGGCCACACCTGTGAGGC
TGCAGTGATTGTGATTCTCATCTCGTGTGGGAAGGAATCCCGCTGTCTTGGCTGACAACTCTACTCGGAGCT
TACCGAGAGCTGAGGAAATACGGCAGCTCACCATCGCCGGTGTGCTTGAATGAAGAGAGAAGTTCGCGCTG
TCAGGGGCTGGATCAGAAACCTGTGGTGCCCTCTTCTCTTTGGTGTTCATCAGCACTGTACTACAATGGATG
TAAGTTTGCCACAAGAAGTCCCAAGGAAGTTTAAAGTGTCTGGGATGAGCCCAAGAGGAAGAAGAACTGGG
GTCTCATTTGCCAAACCTGTCCACTCTTATGGCACCACATATAAGAACTTGACCTGTATGCATATAATAATCA
GATTGAATATGAACACAGAGCACCAGATGCCGCTCTGGGTCTGAAGGAAGGCGCTCCATTCTCAGGGGTCACTGC
ATGTTTGGAGCTCTGTGCTCATGCCACAGAGACTTGCACAACATGCAGAATGGCAGCACAATTGGTATGCACCT
CACTAGAGAAGACAATCGAGAATTTGGAGGAAAACCTGAGGATGAGCAGCTTCACGTTCTGCTCTTATACAAGT
CTCTGACGTGGATGAGTTTGGGAGTGTGGAAGCTCAGGAGGAAGAAAACGGAGTGGTGCCATTCAAGTACTGAG
TCTCTTCGGCGAAAAGTCAGGATGTTAGCAGAGCCAGTCAAGACTTGGCGACAAAGGAACTAGAAGCCAAGAA
AGCTGCAGCTGAAAAGGCTTTCCTCCCTGGGAACAGCTCAATAAAAAATGAAAAGGAAAAGTCAGCCCCATCAG
TACAAAACAACCTGAAAACGCAAGCCAGGCTAAACAGTTGGCAGAACTTTTGCAGCTTCAGGACCACTCATGA
CGAGTCCAGCAGCCCCAGSCTCTACAGAAGCAGCCACCACAGCCCCAGCAGCAGACAGACCCAGCAGCAGCA
GCCACTCACCCTCAGCAGAGACTCTGTCAACTCTTATTCTGCTTCTGGATCCACCAATCCATATGAGCAGGCC
CAATCCAGTTTGTCTCTATCCAACTCTTACACACTTCAGATATCTATGGAGAACCCAGCCCTATGAATCTTA
TTCACCTCATCTCAAGCTGCAGGTTTCATATTTGAATCTTCTAATCCATGAACCCCTTACCTGGGCTTTTGA
TCAGAAATCCCAATTCATCATATAAATGCAATGGAACCTATCAGTGGCAACTGCTCCCATATCTGGGTTCT
CTATTCTCCCCAGTCTCAGCCGATGGATCTGTATAGGTATCCAAGCCAGACCCCTCTGTCTAAGTCACTCTACC
ACCCATCCATCACTTTTACAGCCAAAGTTTGGAAATAGCCAGAGTTTACATCTAAATACTTAGGTTATGGA
CCAAAATGTCAGGAGAGATGGTTTCAGCAGTTGTACCATTAGACCAAATGTACATCATGTAGGGAATTCCTTC
TTATCCCACTCATGAGATGGAATGGCCACTTCATGGGAGCCACTCTAGATTACCAACCAATCTGAGCACTCCAA
CATGGACTATAAAATGGTGAACATCTTACCTTCTCACATAATCCATAAGGATGAGCTCGAGCTCGGCGCATGTT
CAACAGCTCTTTCATGCCCTGCATCTCCAAAACAAGGAAGATGACATGCTTCCACACAGCTAAAGGTTATC
AAAGATGCTTCCAGCTCTTAACCATGATAGAACTGCTGTGTCCAAGGAGGCTTACACAAATTAAGTGATGCTAA
TGGTCAGGAAAAGCAGCCATGGCCACTAGTCCAGGGTGTGGCTTCTGGTGACAGGACAACGATGAGGCTGTGTC
AGACAGCGAGCAGAGCTTCTGGATCCTGACATTTGGGGAAGTGGCCGTGGCTCCAACCTCATGGGTCATCTCAT
TGAGTGTGCAAAAGCGTAGCTGCATGCCACAACCCCTTTAAGAATCCCAATAGGAATCACCCACCAAGGATCTC
CTCGTCTTTTACAGCATAAGAGCATGAATGAGCCAAAACATGGCTTGGCTCTTTGGGAAGCCAAATGGCTGA
AAAAGCCCGTGAGAAAGGAAGAGTGTGAAAAGTATGGCCACAGACTATGTGCGCTCAGAAATCCATGGCCAAA
AGTGAACCGGGAGCGCTGCTGAGCCACATGAACTTCAGAGCCCACTTACCTGCTTTACATCAAGTCTCTGGCGA
AAGGACCATGTCCGTGACCACAGACTCCACAGTAACTACATCTCCATATGCTTCACTCGGGTCACAGGGCCITA
CAACAGATATATATGATATCACCCCTTTTGTGGTTACCTCATTGAAAAGACCAACCAACCTGTCACTAGT
ATAGTCTCATGAGTGGGAGTGGGGAAGGTGACAGTATCATGACAAATGTGGTGGGAAAAACCTCAGCTCA
CCAGACAACAAAGAGGTTATCTTACCATAGCACTTAATTTTCACTGGCTCCCAAGTGGTCACAGATGGCATCTAG
GAAAAGACCAAGAGCTTCTATGCAAAAAGAGGTGGGGAAGAAAGTGTCCGAATTTACATTTTAAACAGCT
TTCTATTATTGGACAGATGATATGTAATGTGATCCCCCCCCCGCTTACAACCTCTACACATCTGTGACCCT
TTAATAATATCAAGTTTGCATAGTCATGGAACACAAATCAAAACAGTACTGTAGTATTACAGTGACAGGAATCT
TAAAATCACTCTGGTGTGAATATATGATGTGATGAAATAGGCTTTTGAAGTCAGGTTTATG
TGTAATCTTAACITTTTATTTATCAAAATAGTACAGGAAACATGAATAGCAGGAAACACATGAATTTGTTGGAT
GTTCTAAGAAATGGTGCTAAGAAAATGGTGTCTTTAATAGCTAAAAATTTAATGCTTTATATCACTCAAGATGCT
ATCAGTGTACTCCAGTGCCTTGAATAATAGGGGTACCTTTTTCATTCAAGTTTTTATCATTAATACCTATTCTTA
CACAAAGCTTAGTTTTTAAATGTGGACATTTTAAAGGCTCTGGATTTTGTCTATCCAGTGAAGTCCCTGTAGGA
CAATAAAGCTATATATGTACATATATACACAAACATGTATATGTGCACACATGATATGTATGATAAATTTTAA
ATGGTGTTTTAGAACACTTTGTCTACCTAAGCTTTGACAACCTGAACAATGCTAAGGTACTGAGATGTTTAA
AACAAGTTTACTTTTCATTTAGAAATGCAAGTTGATTTTTTAAAGGAAACAAAGAGCTTTTTTAAATATTTTGT
CTTTTAGCCATGCATCTGCTGATGAGCAATTTGTGCCATTTTTAACACAGCCAGTTAAATCCACCATGGGCTTA
CTGGATTCAAGGGAATACGTTAGTCCACAAACATGTTTCTGTGTCTCATCTCATGCTATCTGTAACAG

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FIGURE 1474B

TTTTATACAAAATTGTATGACAAGTTCATTGCTCAAAAATGTACAGTTTTAAGAATTTTCTATTAACTGCAGGTA
ATAATTAGCTGCATGCTGCAGACTCAACAAAGCTAGTTCACTGAAGCCTATGCTATTTTATGGATCATAGGCTCT
TCAGAGAACTGAATGGCAGTCTGCCTTTGTGTGATAATTATGTACATTGTGACGTTGTCATTTCTTAGCTTAAG
TGCCCTCTTTAACAAAGAGGATTGAGCAGACTGATGCCTCGATGAAGATGAATAAACAGGGTTAGTTCATGTGAAT
CTGTCAAGTTAAAAAGAAACAAAAACAGGCAGCTGGTTTGCCTGTGGTGGTTTTAAATCATTAAATTTGTATAAAGAA
GTGAAAGAGTTGTATAGTAAATTAATTTGTAACAAAACTTTTTTAATGCAATGCTTTAGTATTTTAGTACTGTA
AAAAAATTAATATATACATATATATATATATATATATATATATATATAGTTTGAAGCAGAAATTCACATCAT
GATGGTGCTACTCAGCCTGCTACAAATATATCATAATGTGAGCTAAGAATTCATTAATGTTTGAGTGATGTTCC
TACTTGTGCATATACCTCAACACTAGTTTGGCAATAGGATATTGAACTGAGAGTGAAGCATTGTGTACCATCATT
TTTTTCCAAGTCCTTTTTTTTATTGTTAAAAAAAAGCATACCTTTTTTCAATCTTGATTTCTTAGCAAGTAT
AACTTGAACCTTCAACCTTTTTTGTCTAAAAATTCAGGGATATTTCACTCATGCTCTCCCTATGCCAACATGICA
CCTGTGTTTATGTAAAAATTGTTGAGGTTAATAAATATATCTTTGTGAGGATTTAAACCTTTTTATTTTGAATC
CCTTCTATTTTACTTGTACATGTGCTGATGTAACTAAACTAAATTTTGAAATCTGTTGGCTCTTTTTATTGTAA
AGAAAAGCATTTTAAAGTTTGAGGAATCTTTTGACTGTTTCAAGCAGGAAAAAAAATACATGAAAATAGAAT
GCCTGAGTTGATAAAGGAAAAATTTGAAGGCAGGAGTTTGGCAAGTGGCTGTTGGCCAGAGACTTACTTGTA
CTCTCTAAATGAAGTTTTTTGATCCTGTAATCACTGAAGGTACATACTCCATGTGGACTTCCCTTAAACAGGCA
AACACCTACAGGTATGGTGTGCAACAGATTGTACAATTACATTTTGGCCTAAATACATTTTGCTTACTAGTATT
TAAAAATAAATCTTAATCAGAGGAGGCCTTTGGGTTTTATTGGTCAACTCTTTGTAAGCTGGCTTTTGTCTTTTT
AAAAAATTTCTTGAATTTGTGGTTGTGCCAATTTGCAAACTTCCAAAAATGTTTGTCTTGTCTTACAAACCCAC
ATGATTTTAAATGTTTTTTGTATACCAATAATATCTAGCCCCAAACATTTGATTACTACATGTGCATTTGGTGATTTT
GATCATCCAATCTTAATATTGATTTCTGTGTCACTACTGTCAATTTGTAAACTGCTGGCCAAACAGAACAGGA
AGTATAGTTTGGGGGTTGGGGAGAGTTTACATAAGGAAGAGAAGAAATGAGTGGCATATTGTAATAATCAGAT
CTATAATTGTAATATAAAACTGCCTCAGTTAGAATGAATGGAAGCAGATCTACAATTTGCTAATATAGGAAT
ATCAGGTTGACTATATAGCCATACTTGAAATGCTTCTGAGTGGTGTCAACTTTACTTGAATGAATTTTTCATCT
TGATTGACGCAGTGATGTACAGTTCACTTCTGAAGCTAGTGGTTAACTTGTGTAGGAACTTTTGCAGTTTGA
CACTAAGATAACTTCTGTGTGATTTTCTATGCTTTTTTAAAACTAGTTTCATTTTCATTTTCATGAGATGTTT
GGTTTTATAAGATCTGAGGATGGTTATAAATACTGTAAGTATTGTAATGTTATGAATGCAGGTTATTGAAAGCTG
TTTATATTATATCATTCTGTATAATGCTATGTGAGTGTTTTTAATAAAATTTATATTATTATTAATGCACTCT

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FIGURE 1475

MAPTYYKKLAPDAYNNQIEYEHRAPECRGLKEGRPFSGVTACLDCAHAHRDLHNMQNGSTLVCTLTREDNREFG
GKPEDEQLHVLPLYKVSDVDEFGSVEAQEEKKRSGAIQVLSFFRRKVRMLAEPVKTCRQRKLEAKAAAEKLSSL
ENSSNKNEKEKSAPSRITQTENASQAKQLAELLRLSGPVMQQSQQPQLQKQPPQPQQQRFPQQQP HHPQTESV
NSYSASGSTNPMYMRPFNEVSPYPNSSHTSDIYGSTSPMNFYSTSSQAAGSYLNSNPMNFPYGLLNQNTQYPYQ
CNGNLSVDNCSPYLGSYSPQSQPMPLYRPSQDPLSKLSLPPFIHTLYQPRFGNSQSFTSKYLGYGNQNMQGDGFS
SCTIRPNVHHVGKLPPYPTHEMDGHFMGATSRLPNLSNPNMDYKNGEHHSPSHIHNYSAAFPMFNSSLHALHL
QNKENDMLSHHTANGLSKMLPALNHDRTACVQGGHLKLSDANGQEKQPLALVQGVASGAEDNDEVWSDSEQSF LDP
DIGGVAVAPTHGSILIECAKRELHATTPLKNPNRNHPTRISLVFYQHKS MNPEKHLALWEAKMAEKAREKEEEEC
EKYGPDYVPQKSHGKKVKREPAEPHETSEPTYLRFIKSLAERTMSVTTDSTVTTSPYAFTRVTGPFYNYRI

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FIGURE 1476

AGGCACAGGCAGCGCTGCATACACTCCTTTTCTCGGTGTCACATTATTTAAAGCATGGGAAATAGTAATGAGAC
AGTGTCTTCTTCATTAGAACCTTAGGAGTCTACTAGATTCTCTCACTCTCTATTGTGTGTATTAGTAGGCAAACT
GTGCAAAAACACGGCTCTTGAGAAATGACAGCACAGTATCTTAGAGGGAAAGGAAATGTAGGATGCCAGTGTGGG
GACAAATTTCTGATTGCCAGTGATTGTTGTGAGCATAACATAATTTATGAACATTATAAGCCCTCTATTGAGGGC
AGCTGCAGTGTGAAAGGAAATTTGCTGCTGGAACATTTAAACCTACACTGCTGTACTCATATAACAAACAAAG
TAACACAGAAAAAATTTAAACCTTTGCTAAAAAAGCAGAAAGCAGCTTGATCTTTAGGAAGGCACGCGAGTTGC
TTATTATGAATCATTTCTAGAGTCCGATGCATTTTCAAAGCCGGTTACAGTCATTACGAAGCACACCTTTGTGAG
GTAAGTGATATCATCACTTTTGGTTTATAAAATAAAAAAGCTGAGACGCCGAGCGAATTAAGTCACTCGCCTAAAGGAG
AATGAGTCAACGTCAAGAGTCAATAGTTGACCCGGCCTAAAGACTCCAGACCATCAGTCCAGGGCTTAGTCAGCGG
GGCCCGGAGTGGCTTCCCTGGCTGGCATCTGGACTTAGGCTATTTCCTGTCACGTAAGAACGGAATATTGGAACG
GTTGCACAGAACTTCCAAATAATTTTACC GCCACGCAAGATTAGCCCTGAGGCTTTAATCTCAGGATTTGGGA
CAGTAAAGAGCTGTGCTCCCTCCCTCGTCCAGCCGGTGGCAAGCGGGTACTGCGGGCGGTTCCGCTCCGCTCCCT
TTCGCAGAAATGGCAACGAATGACCACGACATTAGCTGAGCCAGGGGACGTGGGAGGGTTGATTGCTTAAACGA
CTCTGCATCGCCGCTCTTTTGAACATAAGAGAAATGGTGGGAGATCAAAGAAACATAAATAACACACAGG
CAACTTGTCTGGGACCTCAACTAAGCAAAATGAAGCTTATTGTGTGTGTGAGCTGACGTTCCCAACCTTCCG
GGGAAGATGGGAGACAGGGCGACAAAGGGCACAGTAGGCTTGCTGGCAGTAAGTGTGACCGCAGCATCCAGG
CGGAAGAGCAGAGGACTGAACCTCCCTCCAGCAGCGAGTGTCCGCCGCGTTGAGAACCCGCGACCTTCCCAT
CGCCACGTGACCACTCTCTTTTGAACATAAGAGAAATGGTGGGAGATCAAAGAAACATAAATAACACACAGG
ACTCACTTCCCAAGAGCTCTCGTTACTACGCGAGCGCAGCTTTCGCGCAGGTGCGCCAGGGCCAAACGAGCA
TATCCGTCACTGCGCCAGAGAGTGGCCAAATCCGGTTTGAATCTCATTTTCTCTTACCCCCCTTCTGAGAG
GGTTGTGCGATCAGATCAGATTAAGATGGCGACTGTCAACCCGAAACACCCCTACTCTTAATCCCGCAGCTAC
AGAAGAGGAGAAACCGGAATCTAATCAGGAGGTTGCTAACCCAGAACACTATATTAAACATCCCTTACAGAACAG
ATGGGCACCTCTGGTTTTTAAAAATGATAAAAGCAAACTGGCAAGCAAACTGCGGCTGATCTCCAAGTTTGA
TACTGTTGAAGACTTTTGGGCTCTGTACAACCATATCCAGTTGTCTAGTAATTTAATGCCTGGCTGTGACTACTC
ACTTTTTAAGGATGGTATTGAGCCTATGTGGGAAGATGAGAAAAACAAACGGGGAGGACGATGCTTAATTACATT
GAACAAACAGCAGAGACGAAGTGACCTCGATCGCTTTGGCTAGAGACACTTCTGTGCCATTGAGAGAACTTT
TGATGACTACAGTGATGATGTATGTGGCGCTGTGTTAATGTTAGAGCTAAAGGTGATAGATAGCAATATGGAC
TACTGAATGTGAAACAGAGAGCTGTACACATATAGGGAGGGTATACAAGAAAGGTTAGGACTTCTCCAAAG
GATAGTATTGGTTATCGCTCCACGAGACACGACTAAGAGCGGCTCCACACTAAATAAGTGTGTGTGT
TTAAGAAACACCTTCTGAGTATTCTCATAGGAGACTGCGTCAAGCAATCGAGATTGGGAGCTGAACCAAGCC
CTTCTCAAAAGCAGAGTGGAGCTGCATTTAAATTTGATTTCCTTTAATGTTACTCAGATATTAAGAGAACTTCA
TTGCGCTTTGTCTGTACTTCTGTGTTTCAATTTTTTTTTTTTTTTTGGCTAGAGTTTCCACTATCCCAATCAAAG
AATTACAGTACACATCCCAAGAAATCCATAAATGTGTTCTTGGCCCACTCTGTAATAGTTTCAGTAGAATTACCATT
AATTACATACAGATTTTACCATACTCCACAATAGTCAAGAAACAACTTGGCATTCTATCTTTACAGGAAAAA
TTCTGTTGTTCATTTTATGACAGAGCATATTTGCTGGTTGAAAGAAATATGATGCATACAGTTTCTAGCAAT
TTCTTTGTTTCTTTTACAGCAATGTCTTTGCTGTACTCTGCTGATGGCTGCTAGATTTTAAATTTTATTGTT
CCCTACTTGAATAATTAGTGATTCTGATTTCAGTTTTCAATTTGTTTGTCTTTGTTTTTCTCTCATGTAACA
TTGGTGAAGGATCCAGGAATATGACACAAAGGTGGAATAAACATTAATTTTGTGCAATCTTTGGTAATTTTTTT
GTTTTTGTAACTACAAAGCTTTGCTACAAATTTATGCATTTCAATCAATCAGTGATCTATTGTTGTGATGAT
CCTAAACATAATTTGGATTATAAAAAATGTAAACATATAATTACATTCTTAAGTAAATAGTATGTCCTGTTTT
TGATCTTTTATGCTGATTTTAAACACTTTGTAATTACTTAGGTTATTGCTTTTGGTTAAATAGCTCAAGTAGA
AAAGCAGTCCCATTCATATTAAAGACAGTGTACAAAACCTGTAATAAAATAGTGTACAGTGAATGTCTTTTAGACA
ACTAGATTGTCTCTTTATTTCTCCATCTTTATAGAAGGAATTTGACTCTTATTGCAAGGCGAGTCTCTATATT
ATGCTCTCTTTTGGGTCTCTCGGATGTGAACAGCATAGTTTGGAGCACTAGTTTGATTATTATGTTTATTATACA
ATTTTTAAATAAATGAATAGGTAGTATCATATATATGGA

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FIGURE 1477

AGCGGCACGCACACAGCTCGAGCACCGCCCTTCGGTTGGAGCCATTGCAAGCCCCCCCACGCCCGCCCCC
TCGCTAGGCGCTCGCCACGCCATGCCTCCGTCGCTGCGCGGCCACCCCCGATGTGAGCCCCCGCGCCGACCA
GAATCCGTGAACATGGCGAACGAGGTTATCAAGTGCAAGGCTGCAGTTGCTTGGGAGGCTGGAAGGCTCTCTCC
ATAGAGGAGATAGAGGTGGCACCCCCAAAGGCTCATGAAGTTCGAATCAAGATCATTTGCCACTGCGGTTTGCCAC
ACCGATGCCATACCTTGAGTGGAGCTGATCCTGAGGGTTGTTTCCAGTGATCTGGGACATGAAGGTGCTGGGA
ATTTGGAAAGTGTGGTGGAGGAGTTACTAAGCTGAAGGCGGGTGACACTGTGATCCCACTTTACATCCACAG
TGTGGAGAAATGCAAAATTTGTCTAAATCCTAAACTAACCTTTGCCAGAGAATAAGAGTCACTCAAGGGAAGGA
TTAATGCCAGATGGTACCAGCAGATTTACTTGCAGGAGGAAGACAATTTTCATTACATGGGAACCGACATTT
TCTGAATACACAGTTGTGGCTGATATCTCTGTTGCTAAATAGATCCTTTAGCACCTTTGGATAAAGTCTGCCTT
CTAGGTTGTGGCATTCAACCGGTTATGGTGTGCTGTGAACACTGCCAAGTTGGAGCCTGGCTCTGTTTGTGCC
GTCTTTGGTCTGGGAGGAGTCGATTGGCAGTTATCATGGGCTGTAAAGTGCGTGGTGCTTCCCGGATCATTGGT
GTGGACATCAATAAGATAAAATTTGCAAGGGCCAAAGAGTTTGGAGCCACTGAATGTATTAAACCTCAGGATTTT
AGTAAACCCATCCAGGAAGTGCTATTGAGATGACCGATGGAGGAGTGGACTATTCCTTTGAATGTATTGGTAAT
GTGAAGGTGATGAGAGCAGCACTTGAGGCATGTCACAAGGCTGGGCGCTCAGCGCTCGTGGTTGGAGTAGTGCT
TCAGGTGAAGAAATTTGCCACTCGTCCATTCCAGTGGTAACAGGTGCGACATGGAAGGCACTGCCCTTTGGAGGA
TGGAAGAGTGTAGAAAGTGCCCAAAGTTGGTGTCTGAATATATGTCCAAAAGATAAAAGTTGATGAATTTGTG
ACTCACAATCTGTCTTTTGTAGAAATCAACAAAGCCTTTGAACGTGATGCAATCTGGAAGAGCATTGCAACTGTT
GTAAAGATTTAATTCAAAGAGAAAATAATGTCCATCTGTCTGTGATGTATAGGAAGCAGGTTAAACAGGCAGGG
AGAAGCGCCTCCAACCTCACAGCCTCGTAGAGCTTCACAGCTACTCCAGAAAATAGGGTTATGTGTGCTATTCAT
GAATCTCTATAATCAAGGACAAGGATAATTCAGTCATGAACCTGTTTCTGGATGCTCCTCCACATAAATAATTG
CTAGTTTATTAAAGATAATTTAACAATAATAAAGTAATTTTACATTTTGTGGAAATTTGCTTGTTTTATGCT
GTCACTATTGTGACGGTTTGTCTGCCATTATCTTCATTCTGCAAGGGAAAGGGAAGCAGGGCAGTGGTG
GGTGTCTGAAACCTCAGAAACATAACGTTGAACTTTTAAGGGTCTCAGTCCCCGTTGATTAAAGAACAGATCCCTA
GCCATCAGTGACAAAGTTAATCAGGACCAAGTCTGCTTCTGTGATATTATCTTGAAGGGAGGTACTGTGCCTTG
TTCATACCTGTACCCCAATTTCTAGGATGGCATCTGCCCTTCAGGGGGCACTAAAATGTATTATTGAAACAGCA
TTCTGGGCTTAAATAGGTGATGTATGTGTTGGTTGTGACTGTACTATTTCTAGTATAGTGAACATACATCTGAA
TATCCAAGTTCTCAGCACTACTTTTGTCAAATCTTAACATTTTGCCACTTCGAGATCAGATTGCCATTCCTCCC
CTCCAGAGGTAACAATTATCCCAATTTGATGTTTATCATTTCTGTGTGTTGTACTTTCACTGTGATATAACCTA
AACCCTACTACTCTTTAGTACTGTTTATATATTTTAAAGCCTCATACTTGCTCATTCTACAGCTTTTTCCTCA
TTATGTATAATTATATCTGAAGCTCTCGTTCAATTAATTTTAGTCTGTGTAGCAGAATTAATACGGGAACCTA
CCAATAATTTATCTGTTCTCCAGTGAAGGCAATGAAGTTGTTGCCAGTTTCTGTATATATAACACTGTAGTGGAA
TTCTTCTGCAATGGGCTCACTGCGTGTACCTAAGACGTATCAGACAATAAACACATTTAGCCTTATAGACATTG
CCAAATTTGCTCTTCAAAGTAAATGTGAGTTTGTGAATTACATGATGATGGAATGGTGTTTATTATGACTTTA
GTTTGCAATTTCCCTCA

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FIGURE 1478

CGCAGTTTGAATCGCGGTGCGACGAAGGAGTAGGTGGTGGGATCTCACCGTGGGTCCGATTAGCCTTTTCTCTGC
CTTGCTTGCTTGAGCTTCAGCGGAATTCGAAATCGCTGGCTGGCGGTAAGGCTGGAAAGGACTCCGGAAAGGCCAAGAC
AAAGGCGGTTTCCCGCTCGCAGAGAGCCGGCTTGCAAGTCCAGTGGGCCGTATTTCATCGACACCTAAAACTAG
GACGACCAGTCATGGACGTGTGGCGCGACTGCCGCTGTGTACAGCGCAGCCATCCTGGAGTACCTCACC GCAGA
GGTACTTGAAGTGGCAGGAAATGCATCAAAGACTTAAAGGTAAAGCGTATTACCCCTCGTCACTTGCAACTTGC
TATTTCGTGGAGATGAAGAATTGGATTCTCTCATCAAGGCTACAATTGCTGGTGGTGGTGCATTCCACACATCCA
CAATCTCTGATTGGGAAGAAAGGACAACAGAAGACTGCTTAAAGGATGCCTGGATTCTTGTATCTCAGGACT
CTAAATACTCTAACAGCTGTCCAGTGTGGTGATTCCAGTGGACTGTATCTCTGTGAAAAACACAATTTGCCTT
TTTGTAATTCTATTGAGCAAGTTGGAAGTTAATTAGCTTTCCAACCAACCAAATTTCTGCATTGAGTCTTAA
CCATATTTAAGTGTTACTGTGGCTTCAAAGAAGCTATTGATTCTGAAGTAGTGGGTTTTGATTGAGTTGACTGTT
TTTAAAAAAGCTGTTGGATTTTAATTGTATGCAGAAGTTATAGTAACAAACATTTGGTTTTGTACAGACATTAT
TTCCACTCTGGTGGATAAGTTCAATAAAGGTCATATCCCAAACATAAA

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FIGURE 1479

MAGGKAGKDSGKAKTKAVSRSQRAGLQFPVGRIHRHLKSRTTSHGRVGATAAVYSAAILEYLTAEVLELAGNASK
DLKVKRITPRHLQLAIRGDEELDSLKATIAGGGVIPHIHKS LIGKKGQKTV .

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FIGURE 1480

AAGATGCTGAAAGGAAAGAAGGCCAAGGGAAAGAAGGTGGCTCCGGCCCTGCTGTCGTGAAGAAGCAGGAGGCT
AAGAAAGTGGTGAATCCCTGTTTGAGGAAAGGCCTAAGAATTTTGGCATTGGACAGGACATCCAGCCCAAAAGA
GACCTCACCCGCTTTGTGAAATGGCCCGCTATATCAGGTTGCAGCAGCAGAGAGCCATCCTCTATAAGCGGCTG
AAAGTGCCCTCCTGCCATTAAACAGTTCACCCAGGCCCTGGACCGCCAAACAGCTACTCAGCTGCTTAAGCTGGCC
CACAAGTACAGACCAGAGACAAAGCAAGAGAAGAAGGCTGTTGGCCAGGCCGAGAAGAAAGCTGCTGGCAAAGG
GGACGTCCCCACCAAGAGACCCTGTCTTTGAGCAGGAGCTGGCTGTCTTCTTGCTGCCCTATGTCGTAATAA
TGGTGGTCCCTTAGTGCAATTATCAAGAGGAAGGCAAGACTGGGACGTCTCGTCCACAGGAAGACCTGCACCACTG
TCGCCTTCACACAGGTGAACCTCGGAAGACAAAGGCGCTTTGGCTAAGCTGGTGGAAAGCTATCAGGACCAATTACA
ATGACAGATACGATGAGATCTGCCGCTCACTGGGGTGGCAACATCCTGGGTCCTAAGTCTGTGGCTCGCAATTGCCA
AGCTCGAAAAGGCAAGGCTAAAGAACTTGCCACTAAACTGGGTAAATGTGCACCTGTTGAGTTTCTGTACATA
AAAATAATTAATAATACAAATTTCTTCAAAGAAAAAAAAAAAAAAAAA

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FIGURE 1481

MLKGGKAKGKKVAPAPAVVKKQEAKKVVNPLFEERPKNFGIGQDIQPKRDLTRFVKWPRYIRLQQQRAILYKRLK
VPPAINQFTQALDRQTATQLLKLAKHYRPETKQEKKAVGPGREESCWQRGRPHQETTCPLSSWLSSCLPYVVKWW
SLSALSRRQDWDVSTGRPAPLSPSHR

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FIGURE 1482

CCTCTCTCCGGTCCGTGCTCCAAGATGACAAAGAAAAGAAGGAACAATGGTCGTGCCAAAAGGGCCGCGGCCA
CGTGCAGCCTATTGCTGCACTAACTGTGCCCGATGCGTGCCCAAGGACAAGGCCATTAAAGAAATTCGTCATTG
AAACATAGTGGAGGCCGAGCAGTCAGGGACATTTCTGAAGCGAGCGTCTTCGATGCCCTATGTGCTTCCCAAGCT
GTATGTGAAGCTACATTACTGTGTGAGTTGTGCAATTCACAGCAAAGTAGTCAGGAATCGATCTCGTGAAGCCCG
CAAGGACCGAACCCCCACCCCGATTAGACCTGCGGGTGCTGCCCCACGTCCCCCACCACCAAGCCCATGTAAGG
AGCTGAGTTCTTAAAGACTGAAGACAGGCTATTCTCTGGAGAAAAATAAAATGGAAATTGTACTTA

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FIGURE 1483

GAACCGCCATCTTCCAGTAATTCGCCAAAATGACGAACACAAAGGGAAAGAGGAGAGGCACCCGATATATGTTCT
CTAGGCCTTTTAGAAAACATGGAGTTATTCCTTTGGCCACGTATATGCGAATCTATAAGAAAGGTGATATTGTAG
ACATCAAGGGAACGGGTACTGTTCAAAAAGGAATGCCCCACAAGTGTTACCATGGCAAACTGGAAGAGTCTACA
ATGTTACCCAGCATGCTGTGGCATTGTTGTAACAACAAGTTAAGGGCAAGATTCTTGCCAAGAGAATTAATG
TGCCTATTGAGCACATTAAAGCACTCTAAGAGCCGAGATAGCTTCCTGAAACGTGTGAAGGAAATGATCAGAAAA
AGAAAGAACCCAAAGAGAAAGGTACCTGGGTTCAACTAAAGCGCCAGCCTGCTCCACCCAGAGCAGCACACTTTG
TGAGAACCAATGGGAAGGAGCCTGAGCTGCTGGAACTATTCCCTATGAATTCATGGCATAGGTGTTAAAAAAA
AAAAAAATAAGGACCTCTGGGCTACAA

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FIGURE 1484

ATGAATTTTGAACCTTATCCTTGAGCACTGATCAATTTTCTAAAGTACTGGGGGTGTGGAAACAGTAAAGCTT
AAACTGACACAAGATGAAATAGAAAACCTTACATTGCCCTGTCTCCATTAAAGGAACCTTGAAGAAGCCAAATTGGCA
GAGAATGCTTGTACCCCTGGCTGACCTGACAGAGGGTCAGGTTGGCAAGCTACTCATCCGCAAGTCTGGAAGGGTG
CAACTCCTCTTGGGCAAGGTGACTCTGGACGTGACCATGGGAACTGCCTGCTCCTTCCCTGCAGGAGCTGGTGTCC
GTGGGCCTTGGAGACAGTAGGACAGGGGAGATGACAGTCCCTGGGACACGTGAAGCACAACTTAGGAAGCAGCAG
CAGGGAGGAGTGGCTGTGACATCACAGCCTGTGACTCTACTGGTGCAACAAGCAGTAACCCCTCTGGGCACCTCT
AGCTCTCTCTCAGGGCCCTGGGGCCACACTGGTGAAGCAAGGCCCCCGAAGGGAGTCCCATCCCCTTTCACCC
CGAGAAAAGCACCTTTCCCCAAGCCACAGCCCTGCCAGGGGTCTATCTCCTCTCTCAGGCCAAATAA

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FIGURE 1485

GGGAAGTGCTGTTGGAGCCGCTGTGGTTGCTGTCCGCGGAGTGAAGCGCGTGCTTTTGTTTGTGTCCCTGGCCA
TGGCGCTGCAGCTCTCCCGGAGCAGGGAATCACCTTCGCGGGGAGCGCCGAAATCGTGGCCGAGTTCCTTCAT
TCGCGCATCAACAGCATTTTATATCAGCGTGGCATATATCCATCTGAAACCTTTACTCGAGTGCAGAAATACGGAC
TCACCTTGCTTGAACACTGATCTTGAGCTCATAAATACCTAAATAATGTGGTGAACAACGTGAAAGATTGGT
TATACAAGTGTTGAGTTCAGAACTGGTTGTAGTTATCTCAAAATATTGAAAGTGGTGGGTCTCGAAAGATGGC
AGTTTGATATTGAGTGTGACAAGACTGCAAAAGATGACAGTGCACCCAGAGAAAAGTCTCAGAAAGCTATCCAGG
ATGAAATCCGTTGAGTATCAGACAGATCAGAGCTACGGTGACATTTCTGCCACTGTTGGAAGTTTCTGTTCAT
TTGATCTGCTGATTTATACAGACAAAGATTGGTTGTACCTGAAAAATGGGAAGAGTCGGGACCACAGTTTATTA
CCAATTTCTGAGGAAGTCGCGCTTCGTTCAATTTACTACTACAATCCACAAAGTAAATAGCATGGTGGCTACAAAA
TTCCTGTCAATGACTGAGGATGACATGAGGAAAAATAATGTAATGTAATTTTGAATGTGGTTTTCCTGAAATCA
GGTCATCTATAGTTGATATGTTTTATTTTCATTGGTTAATTTTACATGGAGAAAACCAAAATGATACTTACTGAA
CTGTGTGTAATTGTTCCTTATTTTTTTGGTACCTATTGACTTACCATGGAGTTAAACATCATGAATTTATTGCA
CATTGTTCAAAAGGAACAGGAGGTTTTTTGTCAACATTGTGATGTATAITCCTTTGAAGATAGTAAGTGTAGA
TGAAAAAATCTGTCTATAAAGCTAGATGCTTTCCATAATCAGATGTTTTGGTCAAGTAGTTTGAAGTCTGATAG
GTAGGGAGATATTTAAGTATAAAATACAACAAAGGAAGTCTAAATATTCAGAACTTTGTTAAGGTCTGAAAGT
AACTCATAATCTATAAACAAATGAATATTGCTGTATAGCTCCTTTGACCTTCATTTGATGTATAGTTTTCCCTA
TTGAATCAGTTTCCAATTTTGTACTTTAATTTATGTAAGTTGAACCTATGAAGCAATGGATATTTGTACTGTTT
AATGTTCTGTGATACAGAACTCTTAAAAATGTTTTTTCATGTGTTTTATAAAATCAAGTTTAAAGTGAAGTGAG
GAAATAAAGTTAAGTTTGTTTTTAAAAAAAAAAAAAAAAAA

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FIGURE 1486

MALQLSREQGITLRGSAEIVAEFFSFGINSILYQRGIYPSETPTRVQKYGLTLLVTTDLELIKYLNNVVEQLKDW
LYKCSVQKLVVVISNIESGEVLERWQFDIECDKTAKDDSAFREKSQKAIQDEIRSVIRQITATVTFLPLEVSCS
FDLLIYTDKDLVVPEKWEEGPGFITNSEEVRLRSFTTIIHKVNSMVAYKIPVND

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FIGURE 1487

CTGGGATTACAGGTGTGAGCCATCTTGCTCATTTTAGTTTAACTTTTGAGTGGTTTGTGTCCTGATTGGACT
CCTACAAATACAGAATTGATGCTAGGAAGGTACCAGGAGATAGATGCACACAGATGGGATTTCGGAGTAGGTTT
GGTTATCCAAGGAGCAGTGTGAGCTCCTTGCTAATGGGATATGGGATGCTGGTGATTCCAGGAAGTGACCTCA
CAATGACTCAAGCTACCATACTGTTGATTGTGAAATGCCAGTTGAAGCATATGTCCTGCGAGCTTAGGGGTGC
TACAAGTTGACCACTGCAGCAGTAAAGATGACTCTGAAGAATGGCATGGGATGGATCCTTTCGAATGCATTGAG
CAGCGGTTCTCCAACCACAGGGCCACAGAGCTGGAGCTGGATCTACCATGAAAGACTTCTGAATCCAGGAAGAGAG
ACTGACTGGGCAACATGTTATTCAGGTGGGACCATCCAGTTGCAGGAAAACAAGCTTAACATGCCCACTGATTCT
ACATTATGCTCCTACCTCCCGGCAGCCTCTCCAGGCCAGAACTTTCTCCAGTCAGCCTCTACAGACCAAGCTCA
TGACTCACAAATGGCCTATTTAGGCCATACCTACCTCAGGCAGTCTCCGCAGATGAGCCTACTGCCTCACAAAC
AGCCTCCACAGGCACAGCTCCATCIGTTACAATGGCCTCTTTAGACCCAGCTCCTGCCTCCCAGCCTTCTCTAG
GCCCAGAATTCTGAAGTCGACCTCACAGGCCAGCTCATGCTTCTTTGCAGCCTCTCCAGGCCAGCTCCTG
CATCTTGGTGGCCCCCTCCAGGCCAGCCTCTGCCCTCCGCTCGGCCTCTACAGTCCCAACATCTGCCTCATAGCAG
ATTCTTGAGGCCAGCACTCTGCTCAGTGTGGACCCCCAGACCCAGATGGTGCTCACTGTGGCATCCTCAGGC
AAAGCTCCTGCCTTTCGGCAGCCTCTCCAGGCCAGCTCCTCCTGCCTCCAGTGGCCTTTTCGGCCCAGCCCA
GCTCATGCTCCCAAGCGCCTTCCAGGCCCGCCTTTTGACTTTCGGTGGCCTCTGCAGGCCCTGACAAGGCCTG
GCCTCCTGCCTCCCGAA

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FIGURE 1488

MLLPFGSLSRPRTFSSQLQTKLMTNGLFRPIPYLTAVSADEPTASQQPPQQLHRYNGLFRPSSCLPAFSLGP
ELSEVDLTRPSSCFFAASPGPPLPPVGLYSPNICLIADS

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FIGURE 1489

AGGGCCGGGGTGGGGCGCTGGCGTTTCCGTTGCTTGGATCAGICTAGGTGCAGCTGCGGATCCCTTCAGCGTCTGC
ATCTCGGCGTCGCCCCGCTACCGTCGCCCGGCTCTCCGCCGCTCTCCCGGGGGTTCGGGGCACTTGGGTCCAC
AGTCTGGTCTGCTTCACTTCCCTGACCTGAGTAGTCGCCATGSCACAGGTTCTCAGAGGCACTGTGACTGAC
TTCCCTGGATTGATGAGCGGGCTGATGCAGAACTCTTCGGAAGGCTATGAAAGGCTTGGGCAAGATGAGGAG
AGCATCTGACTCTGTTGACATCCGAAGTAAATGCTCAGCGCCAGGAATCTCTGCAGCTTTAAAGACTCTGTTT
GGCAGGGATCTTCTGGATGACCTGAAATCAGAACTAACTGAAAAATTTGAAAAATTAATTTGGGCTCTGATGAAA
CCCTCTCGGCTTTATGATGCTTATGAACTGAAACATGCCTTGAAGGGAGCTGGAACAAATGAAAAAGTACTGACA
GAAATTATTGCTCAAGGACACCTGAAGAACTGAGAGCCATCAAACRAAGTTTATGAAGAAGAAATATGGCTCAAGC
CTGGAAGATGACGTGGTGGGGGACACTTCAGGGTACTACCAGCGGATGTTGGTGGTTCTCCTTCAGGCTAACAGA
GACCCCTGATGCTGGAATTGATGAAGCTCAAGTTGAACAAGATGCTCAGGCTTTATTTTCAGGCTGGAGAAGTAA
TGGGGGACAGATGAAGAAAAGTTTATCACCATCTTTGGAACACGAAGTGCTGCTCATTTGAGAAAAGTGTGTTGAC
AAGTACATGACTATATCAGGATTTCAAATTGAGGAAACCATTGACCGCGAGACTTCTGGCAATTTAGAGCAACTA
CTCCTTGCTGTTTGAAAACTATTTCGAAGTATACCTGCCTACCTTGCAAGACCCCTCTATTATGCTATGAAGGGA
GCTGGGACAGATGATCATACCCCTATCAGAGTCATGGTTCAGGAGTGAAGATTGATCTGTTTAAACATCAGGAAG
GAGTTTAGGAAGAAATTTGCCACCTCTCTTTATTCATGATTAAGGGAGATACATCTGGGGACTATAAGAAAGCT
CTCTGCTGCTCTGTGGGAAGATGACTAACGCTGTACGGGGAAGAGCTCCCTGCTGTGTGCTGCAACACCCCA
CTGCCCTCCCTTCAGCACCTTTAGCTGCATTGTATGCCAGTGCTTAAACATATGCCTTATTCATCTAGCATGCT
CATGACCAACACATACAGCTCATAGAAGAAAAATAGTGGTGCTTCTTCTGATCTCTAGTGGAGATCTCTTTGACT
GCTGTAGTACTAAAGTGTACTTAAATGTTACTAAGTTTAAATGCTCGGCCATTTCCATTTATATATATTTTAAAG
AGGCTAGAGTGTCTTTAGCCTTTTAAAAAATCCATTTATATATCATTTGTAACCATGATACTTTAATTAGAAG
CTTAGCCTTGAATTTGTGAATCTTGGAAATGTATTAGTGAAGTTCGCAACTAAACTAACTGAAAAATTATG
ATGATTGTATTCAAAAGATTAATGAAAAATAACATTTCTGTCGCCCTGAATTAT

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FIGURE 1490

MAQVLRGTVTDFFPGFDERADAETLRKAMKGLGTDEESILTLTSSRSNAQRQEIISAAPKTLFGRDLLDDLKSELTG
KFEKLIVALMKPSRLYDAYELKHALKGAGTNEKVLTEIIASRTPPEELRAIKQVYEEYGSSEDDVVVDTSGYQQ
RMLVVLLQANRDPDAGIDEAQVEQDAQALFQAGELKWGTDEEKFITIFGTRSVSHLRKVFDKYMTISGFQIEETI
DRETSGNLEQLLLAVVKSIRSIPAYLAETLYYAMKGAGTDDHTLIRVMVSRSEIDLNFIRKEFRKNFATSLYSMI
KGDTSGDYKALLLLCGEDD

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FIGURE 1491

CATAACAAAGCCAAACGCCAGACCGAGAGTGCCTCCGTGCGCGAGTGCCTGGTGTGTGCGCGCGCGGAGAGCAGG
 GGCCCGCCCGCGCTCCCCGCCCGCCGCGGCCGGAACATCATGTCAGCTCCGAGCGAGCGAGCGCGCCGCGCGCGGAGG
 CCTCGCCGCAAGCCCTCCGCGAGCAGGCTGCTGCTGTTTCCCGGGGAGATCATGAACAGGAGTGCCTTCCGAGC
 AGCAGTGAGGATTCTGACGACAAATGGCAGCCTGTCAACTACTTGGTCCAGAAATTCGCGATCCGAGCATAGGAGA
 AGCTCTCTGCTCCAGACATGAAGATCGAAAGCCTTCAGAGGTGTTTAGGACAGACCTGATCACTGCGCATGAAGTTG
 CATGACTCTACAGCTGAATCCGATGAGTACTATGTGTGTGGCAGATCCCTGGAGACAGGAATGGGAGAAAGGG
 GTCCAGGTGCTGTGAGCCCGGGGACCATCCCTCAGCCTGTGGCCAGGGTGTGTCTGAAGAGAAATCCCTCATG
 TTCATCAGGCCCAAGAAAGTACATCTGTGTCATCAGGCTCTGAGCCTCCCGAGTTGGGGTATGTGGACATCCGGAGC
 CTGGCTGACAGCGTGTGTGCGTATGACCTCAATGACATGGATGCTGCATGGCTGGAAGTACCAATGAAGAATT
 AAGGAGATGGGAATGCCTGAACATGATGAATACACCATGGAGAGGGTCTAGAGGAATTTGAGCAGCGGTGCTATC
 GACAAATGATGAATCATGCCATAGAGACTGAGGAAGGCTGGGGATCGAATATGATGAAGATGTTGCTGTGATGTC
 TGCCAGTCTCCTGATGTTGAGGACGGCAATGAGATGGTGTCTGTGACAAATGCAACATCTGTGTGACACGAGCC
 TGGTATGGAATCTCAAGGTACAGAGGGCATGAGTGTGCTGCGGACATGTGCCCTGGGGGTTGAGCCAAATGTT
 CTGCTGTGTCGAAGAAAGGGTGGAGCTATGAAGCCACCCCTAGCGGAACCAATGGGTCCAGCTTAGCTGTGCT
 CTGTGGATCCCTGAGGTGAGCATTTGGCAGCCAGAGAAGATGGAGCCCATCACCAAGTGTACACATCTGTGAAGAACTG
 AGCCGGTGGGGCGCTAGTGTGACGCTCTGCAATGAGAAGTTTGGGGGCTATACAGTGTCTGTGAAGAACTG
 CGCACAGCCTTCCATGTGACCTGTGCTTTTGACCGGGGCTGGAGATGAAGACCATCTAGCAGAGAATGATGAA
 GTCAAGTTCAAGTCTATTGCCCAAAGCACAGCTCAATAGGAACCCGAGGAGATCTTGGCAAGGGGGCTGCA
 CAGGAGAAATGGGGCCCTTGAGTGTGCTCCCCCGGAATCCGCTGGAGCCCTTTGCCAGCCTTGAGCAGAACCGGGAG
 GAGGCCAACCGGGTGAGTGTCCGTAAGCAGAAGCTGCACAGTTGGAAGATGAGTCTACACCTTCGTCAACCTG
 CTGATGTTGCGAGGGCTGTGCGGCTGCTGAGGAAGTATGAGTCTGTACACCTGGAAGTTGAAGAGG
 AAGGTCAACTTCAACAAGCCCTGTATCACCCAAAGAAAGATGAAGAGGACATCTAGCCAAAGCGGGAGCAGGAT
 GTCTTATTTAGGAGGCTGACGCTGTTACGCACTCGCGCAGGACCTGGAGAGGGTAAATGATTGACATGACACC
 TTATAGTGACTTAGAGAAGAAGATGCAAAAGGGGAAACGCTCGCCAGAGGCAAGAAATGATAGCCAGTCAATATAC
 TCTCAGACCCCTGTACACACCAAGCATGAGGTTGTGTGGTAAAAATATTTATGGGCTGGTAAACTCATTTGTA
 CATATGTGCAAAATGCTACTGAGTGGGAGCTTCTTTGTGGTTTTTTTTTTTAAAAACATTTCCCATTAATC
 TTTACTGTTTTGTAAGATCAATGGGGTGTGCTTCCCCACCCCATTCCTTCATCTAGAGCTAGATGAATGA
 GCCCCAAGAAATGACCAAGGAGTTGACTCAGGATGGTTACAGACTGATTTAGAAAACAGCAACCTAGGTGCTGGTATGGG
 TTCTAATGGAGGGGGCCAGAGATGGGAAATTTCTTGTTGAGTCCGGGAAACACACCTAGGTGCTGGTATGGG
 CTTATGAAGGAAGCTAAGCAGCGCTGCTCACTGGCCCCCACTTTGTTTCTGGGTAAATCACAGGGGAATTTCCCA
 GTACTGTCATGAGCAGACGACGAGCAGTGGGTGCTGATGTGTGTCATGAGCTGTATGACACATGCATATATCTG
 TTACAGAAGATACTCTGGCAGTGAGGTGCTAAGTCACTGAGGCTGTGTGTGTGTGTGTGTGTGGCGGCTGCC
 CGTGTCCATCCATGCTCTGTTGTGTGCTGTGTGCGGGTATGGGTGGGATCTCGTGGTGAACAGGGGTTCCCA
 CTGCTGAGGAGGCCCATGATGCTCAGCAGCAGTACAGATGTGTTGTTGTGCACTGAGATGCTGAATGTGCTG
 GGTGTGTGGCTGCCAGGCTCAGCTGCTGGCATTCTCTGCTGTTTGTCTGTTGTGCTCTTTGTGCTTCCCATCTTCC
 ATCACCTCTGGAGTCCGCTGTGACGCTCCCTTCTGCTACAGGAATAATGAGCGTGGGCTGCTCCGCTAGGG
 CCTCTGCTCCTGTAGGTAGTTTCTGGCTGAGGCTTGCTAATTGGGGATGCTTCTTAGAGCATCTTCCACATCA
 ACTCCCCTGCTGCTGCTACCGATTAAATCATTAGTGTGAAGAGGTTGGGAGTGAGGTTTTCTGGCCTGAAGC
 AGTCTGCACTGAAAGTACCAAGTGGCCCTGAAACAGTGTAGGGAAGACTGGGAAACACTGGACCAAAAAAGC
 CTGATCTCATGGAGACCTGCATGGCCCTGTAGAGATGGCGTAGAAGTGAAGGCTCTAAAGGGAGAGATAGAGAT
 CCTTTTAAACACGACTGAGTGGCAGCTTATTTGTGATGCCCTTCCGACACAGGTAGGATCTCTGGGAAGGC
 CGCGGATTCGCGCCCTGGAAGGAGCGAGGATCTGGAGCAGTTTTGTGAGGCTTTTGTGCTCCCATACGCCCTGT
 GTGGTGAGTGAAGAAGACTTTGCTCTCAACACTACATGTATGTGGGCAATTTTTGTAGAGATGAGAAAAGG
 ATTGAGAAGGATAAATCTGGAATCTGGTGAAGAAGCCTTTATGCCAGCCGACACCTGCTGTAAATGGGGTGATG
 AGCTATGGAGTCAGATAGTTGTGGGAGGGGAGGACGAAGTCTTATGTTGGACTGTGTTTGTCTCAATC
 ACCACAAAATAAAGTGTGAAAAATGCTTGTGGTGTACTAAGCTTTCTGTACTAAGTCTTACTCAAGATTAACAT
 GCACCTTAATCTCAAAATTTTTTTGGAGTCATCACTGTGCTGTTTAAAGTAGAACATGCCAAGATGTATG
 AGAAACAGGGAATAAATCAGGATTTGTGTGT

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FIGURE 1492

MKGRGLPSSSESDDDNGSLSTTWSQNSRSQHRSSCSRHEDRKPSEVFRDITAMKLDHSYQLNPDEYYVLADP
WRQEWKGVQVPVSPGTIPQPVARVVSEEKSLMFIIRPKKYIVSSGSEPPPELGYVDIRTLADSVCRYDLNDMDAAW
LELTNEEFKEMGMPELDEYTMERVLEEFQRCYDNMNHAIETEEGLGIEYDEDVVCQSPDGEDGNEMVFCDK
CNICVHQACYGILKVPEGSWLCRTCALGVQPKCLLCPKGGAMKPTRSGTKWVHVSCALWIPEVSIIGSPEKMEPI
TKVSHIPSSRWALVCSLCNEKFGASIQCSVKNCRTAFHVTCADFDRGLEMKTIILAENDEVKFKSYCPKHS SHRKPE
ESLGKGAQAENGAPECSPRNPLEPFASLEQNREEAHRVSVRKQLQLEDEFYTFVNLLDVARALRLPEEVVDFL
YQYWKLRKRVNFKPLITPKKDEEDNLAKREQDVLFRRLQLFTHLRQDLERVMIDTDTL

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FIGURE 1493

GTGAGTGTGTGTCGGTCGCACGGCGTGTGTCTCCGGCCGCGGGTTCGGCTCTCTCCCTGCCGCCGCTGCTCACG
GTGTAAGTCAATGTGAAGCAGCAGCTCCAGCCCCGGGATAAACATGGCGACGCTCTCTGCATGAGGGAGCCACGAA
CCAGCTGGATCTGCTCATTTCGGCCGTGGAAGCATCAGTTCCAGCAGTAAATGCGACACTGTACAGATAAGACAA
TGAAGCTGCTGAAGCCCTGCTCATATGGAATCTCTACCTGCTTGAGGGATTCGAAGAAGTCTCTGGGAAGTGTT
TGTTCTCTTGTGTATCAACTCCAGAATTCATCCATGCTGCTATGAGGCCAGATGTCTTACAGAACTGTAGT
GGAGGTGTCAACTGAAGAGTCTGAACCCATGGATACCTCTCTATTCCAAACATCACCAGATGCCATGAACCAAT
GAAAAAGAAAAAGTTGGCCGTAAACCAAGAACCAGCAATCACCATTCCCAATGGGTCTCTGAGTTAGGTAT
AAAGAAGAAACCAAGAGAAGGAAAGGAAACACAACCTATTGTGGGAGTTTCTTTAGATCTACTTCAAGATAA
AAATACTGTGCCAGGTATATTAATGGAAGTCTCAGAGAGAAAAAGGCATATTCAAGCTGGTGGATTCAAAGGCTGT
CTCTAAGCTTTGGGGAAAGCATAGAACAACACAGACATGAAGTATGAAACCATGGGACGAGCTTTGAGATACTA
CTACCAAGGGGAATCTTTCGAAGGTTGAAGGACAGAGGCTTGATATCAGTTCAAGGATATGCCGAAAAACAT
AGTGGTCATAGATGATGACAAAAGTGAACCTGTAATGAAGATTAGCAGGAAGTCTGATGAAAAATCATTAGA
ACGAGTGTCTACTGTCTGCAGAAAGTCTCTCTGAAAGCAGCATCTCTGTTCCGAGTGGAAAAAATTCATCCCTAT
AAACTGCTCCAGAGCAGAGAAGGGTGTAGCTAGAGTTGTGAATATCACTTCCCCTGGGCACGATGCTTCATCCAG
GTCTCTCTACTACCACTGCACTGTGTGCAGCAACAGCAGCTCCAAGGACAGTTCTGTGTGGCAATGCAGGTACCTGT
TGTAATGACATCATTGGGTGAGAAAATTTCAACTGTGGCAGTTTCAAGTCAAGTAAATGAGTGCACCATTAATAAC
CAGCACTAGTCCAACAACAGCAGCCTCTCCAAAGGTAGTCATTAGACATACCTCTGTGATGCCAGCTTCTAC
TGAAAAATGGAGACAAAATCACCATGCAGCTGCCAAAATTAATACCATCCGAGTACACAGTCTGCACAGTGTCA
ACTGCAGACAAAGTCAAAATCTGACTGGATCAGGAAGCATTAACATTGTTGGAAACCCATTGGCTGTGAGAGCACT
TACCCTGTGTTCAATAGCCCATGGTACACCTGTAATGAGACTATCAATGCCTACTCAGCAGGCATCTGCCACGAG
TCCTCTCGAGTTTGAAGTCAGTACATAAAGGGGCCAGAGGTTAAATCGGAAGCAGTGGCAAAAAAGCAAGAAC
TGATGTGAAAACCTTTGCAGCTAGTAGAAGAAAAACAGCAGATGGAATAAGACAGTGAACCCAGCTAGTGGTTGT
CAGTGGCCCTTCAGCTATTGCCCTTCCCTGTAACTATGAAAACAGAAAGGACTAGTGACATGTGAGAAAAAATAG
CAGCTCCACCATGGACTTCAGGCTGTTAGTGGCAGTACTGACATAAACATTTGCAAGGGGAAGTCAATCAAGAAAAAG
TCAAGAAGACTTTAAACATTTTTAATGCATATACAAAAACAATCAGACTTACTGGAATAAATACCTATCCC
ATGTTTCAGTGGGAAATGAACATCATATTGAGATGCTGACAGAAAACTGCCTCTTACAGTAGGAAACCACTGAAC
CCATCAATAAGAAAAAGGATCGAAAGGACCAAGCAGCTCACTACGATATCAAGTTACACTAAGACTTTGGAACAC
TAACATCTGTGAAGAGTTATATAGTTTTTCAGTGGGAGGGGTTGGGATGGGTAATCTCATTGTTACATATAGCAA
TTTTTGATGCATTTATATGCTACACCAAGCAATTAATCTGTGTTCCGACAGTCTCACTTAACCTGGTGCATATGTG
AAGACTCTGCTAATATAGGTATTTTGAAGTGTGAATTGAAGAATGGATCCCAAAAACCTTCAGAAAGAGGATAGCA
AAAAAAGATCTAGTGGCATTTTAGTCTTAAG
CTGATTTAAACAAAGGCCTTAGACTAATTTTCGATTTTCTTTCTGAAATAAGCTAATGGCTTGTGTTGTGTAAG
GCTTTTTTATTAAGAAAAAATTTTAAAAATCTTGTAAGTGCAGAGTATGTTATAGAATATACATGTAAACATT
TTATATGGTATTTAAGTCTGTCAGTTTCTTAATTTGGGACAAATTAACAGTTGGCTCTGGCCCTTTGCTGTGAAC
ATGCCGTGTGTAACCTAGCTTGGCATTGTGTGCAGACATACCAATTTTCAGTTCTGCTGTCACCTTGAAGTTC
AGGCTCAGCATGAATTTTTGGCAGGTAGCTCTAATACCTGGAGTTTCTTTGTTTTTTTTCTTTTTTTTGTGTTG
AAGTTTATGAGGGAAATACCAGTGTTCAGTTTTGAACTATAATAGTTTGTATATCAACATTTGAAGTATATTCT
ATTTTGTGTACTCTGTTTCAAAGTGTATTCAGTAGGTTTCTGAAATATAGAAATGAAATTTATCTTCTGTT
TTGGTCTCTGGTATATTTTAAACAAATTTTAAAGTCAGATAGAAGTGTGTTTAGTAGGAAGTGATAAAACAT
CTCTCTCTCTCTTCCCACTACTGCATGAAGAAATCTACTTCCATTATATTAATATTGG

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FIGURE 1494

GCACGAGGGACTTCTGTTCAGAGCAAAGGTCATTACGCCGCTTGAATCAGCCTTTTCCCCCACC CGGTCCCCA
ACTTTGTTTACCCGATAAGGAAGGTCAGCATTCAAAGTCAAGAAGCGCCATTTATCTTCCCGTGC GCTCTACAAA
TAGTTCGGTGAGAAAGATGGCCGGGAACTCGATCCTGCTGGCTGCTGTCTCTATTCTCTCGGCC TGTAGCAAAG
TTATTTTGCTTTGCAAGTTGCAAAGGCAAGATTAATAACAAAGTTACGCCCCAGCAGTCACTGGGT CACCAGA
GTTTGAGAGAGTATTTTCGGGCACAACAAACTGTGTGGAGTTTATCCTATATTCATAATTACATT GTGGATGSC
TGGGTGGTATTTCAACCAAGTTTTTGTCTACTTGTCTGGGTCTGGGTGACATATATGGCCGT CACCTATACTTCTG
GGGATATTCAGAAGCTGCTAAAAACGGATCACCGGTTTCCGACTGAGTCTGGGGATTTTGGCCT TGTGACCCT
CCTAGGTGCCCTGGGAATTGCAACAGCTTTCTGGATGAATATCTGGACCTCAATATTGCCAAGAACT GAGGCG
GCAATTCTAACTTTTTCTCTCCCTTTAATGCTGCAGAAGCTGTCCCAACATGAAGGTAATATGGTATCATT
GTTAAATAAAAAATAAGCTTTTATTCTGTTAAAAA

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FIGURE 1495

MAGNSILLAAVSILSACQQSYFALQVGKARLKYKVTTPPAVTGSPFEFERVFRAQQNCVEFYPIFIITLWMAGWYFN
QVFATCLGLVYIYGRHLYFWGYSEAKKRITGFRSLGILALLTLLGALGIANSLDEYLDLNIKKLRRQF

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FIGURE 1496

CGCCGAGCTCCAGCCGAAGGAGAAGGGGGGTAAGTAAGGAGGTCTCTGTACCATGGCTCGTACAAAGCAGACTGC
CCGCAAAATCGACCGGTGGTAAAGCACCAGGAAGCAACTGGCTACAAAAGCCGCTCGCAAGAGTGCGCCCTCTAC
TGGAGGGGTGAAGAAACCTCATCGTTACAGGCCTGGTACTGTGGCGCTCCGTGAAATTAGACGTTATCAGAAGTC
CACTGAACTTCTGGTTCGAAACTTCCTTCCAGCGTCTGGTGCGAGAAATTGCTCAGGACTTTAAACAGATCT
GCGCTTCCAGAGCGCAGCTATCGGTGCTTTGCAGGAGGCAAGTGAGGCCTATCTGGTTGGCCTTTTGAAGACAC
CAACCTGTGTGCTATCCATGCCAAACGTGTAAACATTATGCCAAAAGACATCCAGCTAGCACACAGCATACGTGG
AGAACGTGCTTAAGAAATCCACTATGATGGGAAACATTCATTCTCCCATGGGGTCAAAGGTACCTAAGTATATG
ATTGCGAGTGAAA

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FIGURE 1497

ATCAAGAAAGGAAAGCTCATCTCGCCACATTCTGGAAGCGCTGTTCCCGGTGCTCACCTATTGTCTCGCAGG
CAGGTTTCTGAAAGGATGGAGGAAATCTGCAGGAAGCACATGTTTCTGCTTAATTCTGCCAGCTTTTGGCTGTC
AGACCCCAAATCCTTCAGCCACTAGCCTGTTCAAGGCCCTGGTTTGATAACCCGTGCAATTGCAGAGTGGAGTGGG
AGGAGAAGCCTCATACCTTTGTTTTCTGGTTCTTCCCAACCCCTGGTGGCCTACTTGGGTGTCCCAAGCTC
TCTGTGGAAAATAGTGCATCTCATTAGCAACAACCTCCACCTAGCACAAAGTTCTGAGCTATACTTAAACCACTGG
GGAGAGAGTGTGGAAATGATTAAGGCTTGCATTCGACTGTGCAAGAAGAACCATTTTCTCTTCATGGTGTCTGGAG
GCAGAGATTGAGGCTCTCAAGGAGGAGCTGCTCTTCATGAAGAAGAACCACGAAGAGGAAGTAAAAGGCCTACAA
GCCCAGAGTGCCAGCTCTGGTTTGACCTGGAGGAGCTGGACAAGTATTGGTCTCAGCAGATTGAGGAGAGCGCC
ACAGTGGTCACCGCAGCCTGCCAAGGTTGGAGCTGCTGAGATGATGCTCACAGAGCTGAGACATACAGTCCAG
TCITTTGGAGATCGACCTGGACTCCTTTGAGAAATCTGAAGGCCAGCTTGGAGAACAGCCTGAATGGAGCAGCTCAA
CGGCATCCTGCTGCACCCGGAGTCAGAGCTGGCACAGACCAGAGGGACAGTGCCAGGCCAGGAGTACGAGGCC
CTGCTGAACATCAAGSTCAAGCTGGAGGCTGAGATCACCACTACTGCCGCCTGCTGGAAGATGACGAGGACTTC
AATCTTGTGGATGGCAAAGTGGTGTCTGAGACCAATGATACCAAAGTTCTGAGACATTAA

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FIGURE 1498

MKKGKLISATFLESAPVGAHLLSRQVSERMEEICRKHMFLLNSCQLLAVRPQILQPLACSGWFDNPAIAEWSG
RRSLIPLFFWFFPTPWPTWVSHKLSVENSASHLATTTPSTSSSELYLNQWGESVGMKACIRLCKKNHFLFMVLE
AEIEALKEELLFMKNHEEEVKGLQASASSGLTLEELDKYNSQIEESATVVTTPAKVGAAEMMLTEL RHTVQ
SLEIDLDSLRLKASLENSLNGAAQRHPAAPGVRAGTDPEGQCQAQEYEALLNIKVKLEAEITTYCRLLEDDEDF
NLVDGKVVSETNDTKVLRH

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FIGURE 1499

AAAACACCAAATGGCGGATGACGCCGGTGCAGCGGGAGGGCCCGGAGGCCCTGGTGGCCCTGGGATGSGGAACCG
CGGTGGCTTCCGCGGAGGTTTCGGCAGTGGCATCCGGGGCCGGGGTCCGCGAGGCAAGGCCGAGGATAAGGAGTG
GATGCCCGTCACCAAGTTGGGCCGCTTGGTCAAGGACATGAAGATCAAGTCCCTGGAGGAGATCTATCTCTTCTC
TCTGCCCATTAAGGAATCAGAGATCATTGACTTTTCTCTGGGGGCCCTCTCTCAAGGATGAGGTTTTGAAGATTAT
GCCAGTGCAGAAGCAGACCCGTCGCCGCCAGCGCACGAGGTTCAAGGCATTCTGTGCTATCGGGGACTACAATGG
CCACGTCGGTCTGGGTGTTAAGTGCTCCAAGGAGGTGGCCACCGCCATCTGTGGGGCCATCATCTGSCCAAGCT
CTCCATTGTCCCGTGCACAGAGGCTACTGGGGGAACAAGATCGGCAAGCCCCACACCGTCCCTTGCAAGGTGAC
AGGCCGCTGCGGCTCTGTGCTGGTGCACCTCATCCCTGCACCCAGGGGCACTGGCATCGTCTCGCACCTGTGCC
TAAGAAGCTGCTCATGATGGTGGTATCGATGACTGTACACCCAGCCCCAGGGCTGCATGCCACCCCTGGGCCAA
CTTCGCCAAGGCCACCTTTGATGCCATTTCTAAGACCTACAGCTATCTGACCCCTGACCTCTGGAAAGAGACTGT
ATTTACCAAGTCTCCCTATCAGGACTTCACTGACCCTAGTCAAGACCCACACCAGAGTCTCCATGCAGCGGAC
TCAGGCTCCAGCTGTGGCTACACGTAGGGTTTTATACAAGAAAAATAAAGTGAATTAAGCGTGTCAAAAAAA
AAAAAAAAAAAAAAAAA

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TGAGAACACGCTGTGTGGCTGAAGAAAGTGAAGCGAAGAGCTGATTGGCCCTTGTGCTCCCTCCGCAAGGGGATGTTTCTTCCGAGAGAGCTGGTAATTTCTTGGCCAGTATATGSCAGACAAGTTAACGAGAATTCGTATTGTCAACCATGACAAATTGAACCTTAAGAAATGTCGACAGGAATGCAAAAGAGATGTCCTGTATCGCAATGGAAAATTTATGCATAGAGGTTACACCCCGAGCAAAATAGCATGGATTTCCGAAGACTCTTTGTATTGGTTGTGGTATCTGTATTAGAATAAGCCCTTTGGCCGCTTATCAATTGTCAATCTACCAAGCAACTGGAAAAGAAACACACATCGATTTGTGCCAATGGCCCTCAAACTTCACAGGTTGCCATCTCCCTCGTCCAGGTGAAGTTTGGGGATTAGTTGGAACTAATGTGATTGGAAGTCAACTGCTTTAAAAATTTAGGACAGAAAACAAAGCCAAACCTTGGAAAGATCAGATGCTCTCTGACTGGCGAGGAGATTTGGACTTTTCCGTCGATCTGAATTACAAATTACTTTACAAAGATTCAAGAAGTTCAAGAAGTACACCTAAAAGCCATCATCAAACCTCAATATGTAGACAGGATTCCTAAGGCTCGCAAGGGGACAGTGGGATCTATTGGACAGAAAAGATGAAACCAAGGACACAGGCAATGTATGTCCAGCAGCTTGATTTATCCCACTAAAAGACGAATGTTGAAGATCTTTCAGAGAGAGATGTGCAGAGATTTGCTTTGTGCTGCTGTTTGCATACAGAAAGTGTATTTCATGTTTGTATGAGGCTCTAGTATGCTCTAGATGTCAAGCAGCGTTAAAGGGTGCCTATTACTATACGATCTCATGCTGTAATCCGATAGATATCATTTGTGTGGAACTAGTCTAAGTGATTAAGCTATCTTCCGACTTCTCGCTGTTTATGTGTTACCAAGCGCCTATGGAGTTGTCACTATGCCCTTTTAGTGTAAAGAGAAGGCATAAACAATTTTTTGTGATGGAGTGTGTTTCCAAAGAGAAATCTTGAGATTTCAGAGTGTACATCTGTTTTTAAAGTGGCTGAGACAGCAATAAGAAGAGAGTTAAAGAGTTGGTGTATGATTAATAATCCAGGAATGAGAAGAAAATGGGAGAAATTTAGGCTAGCAATTTGAGTCTGGAGAGTTTACAGATCTCGAAATTAATGGTGATGCTGGGGGAAATGGAACGGGTAAACACGACATTTATCAGATGCTTGTCTGGAAAGCTTAAACCTGATGAAGGAGGAGAACTCAAGCTTGAAGTTCAGTTTATAAGCCACAGAAAATTAGTCCCAATCACTGGGAAGTGTCCGAGTTACTACATGAAAAGATAAGAGATGCTTATACCTCCGCAATTTGACAGCGATGTAAATGAAGCCTCTGCAAAATCATGTATCAGAGGTCGACAGATTAATACCTGGTGAATCTGACGAGTAGTCTTAGGCCCTTTGCTTGGCAAACTGCTGATGCTTATTAATGATGAACATCTGTCATATTTGGATTCTGAGCAAAAGACTGATGGCAGCTCGAGTTCTCAAACGTTTCAATCCATCGATCAAAAAGAGCAAGCCCTTTGTTGGGAACATGACTTCACTATGCCCACCTATCTAGCCGATCGCTCATGTTTGTAGTGTCTCCATTAAGAACACAGATGCAACAGCTCTCAAACTTTTGGCTGGCATGAATAAATTTTGTCTACGCTTGAATAATACATTCAAGAGAGATCAAAACACATAGGCCAGCAATAAACCAATTAATCAATTAAGAGTGTAGAACAAAGAAGAGTGGAACTACTTTTTCTTGATGATAGTAGACTGACTGAGAATCTAGATAGGCCATTTATAAAGAGGAGTATTACTAGAAATTTTTTGTGCATATAAACTTGAATCAGGATTTATGCCCCACATCTTGGAACTTGAAGGATATAATATCAATAAATAAAGGACGGTGGTTTCTAAATTTGATGTAGTTTGGAAACACAGAAAATGCCACTTCTGTTTCTCGAAGAGCCTTTTGTGCAATATCTCAAAATGAAGACATTTCAAGCTATACAAATTACTTCCAAATTTCTCATGATGATAGGGAAGATTTTCAGTAGGGTATATTAATACCGGTGAACATGCTGCACAGCTGTGCTCCATTTTTTAAATCTTGAAAAGGGTTTCTGTACTTACCTGGTTTGGCAAGTAGCCAGTGTAAATAAGAACTGCCCTATTTTTAAAGCCAGTCAAAAGATTTCCACTGATGACATTTGATAAATAAACATCAGGATTATGTTTATTGTTTGTCTAGCTTTTGCACTATATACAGTATATGTTTCCGAGGAAGATTAATCTAGCAAAACCACTGTTTGGAAAATATAGGTATTTTTAAATTTTCTTAACTTTTTTGTGCTTTTTTAAAGCTTTTAAAGAAACCAATTCAGTTCCATTCCCCGCAAAACCCCTAACTTTACTCTGAACTTTTTTGTGTTTGCATTCCTAGGTTCTGTATTCAGTATCTCTTAGGTAATGTCATTTTTTGTACATAATTTATAATACCTGATGAGATTAGSAAAGACATTTCTAAAGAAATTTGCTTCCCTTAGAATCAGACATGCAAAATCTTTAAAGTGGTGGCTAAGCACTATGATTTTTTTAAGTTCCACAGATTTTCTGTTGGGACCGAAGGATATAAACCACTTCCCTAAAGGCAACATTAATGCAAAAGTCCCGGATGGCAATACAGATATCCCTGGTGACCATATATCAATTTGTGAGTTTGGATATAGACAGCAATATCTAAACCAATTTGTAGTTCCAAAACCCATCTAAATTTCTTGAGTTCTCGTAATTTTGAACAGGATCTGAGGCTTGAGCGCCCTTAAAGTTGTCTTCTGACTAATCTGGAATTTAGTGAGTGAAGGAGAGTGTTTACTAAATAAATGACTGGGGCAACAAATGTAGGAGAAATTAGAAATCTTTGACAACTTTAAGAGCTACTGAAATACAGAGTCTTGATTAATGTCAAAATATGCTGTAGAAAGATGGTTTAAAGTCCCAAGCTATTTAAATTTTTCAGTCAACCAATATAATGCAAAATATGCTTAATTTTAAAGATAGGTTAATTTGGAATGATCAATATAAGAAATAAGCAAAAGCTATGTTTATTACTGATCTCTG

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FIGURE 1501

MADKLTRIAIVNHDKCKPKKCRQECKKSCPVVRMGKLCIEVTPOSKIAWISETLCIGCGICIKKCPFGALSIVNL
PSNLEKETTHRYCANAFKLHRLPIPRPGEVLGLVGTNGIGKSTALKILAGKQKPNLCKYDDPFDWQEILTYFRGS
ELQNYFTKILEDDLKAIIPQYVDQIPKAAKGTVGSIIDRKDETKTQAIVCQQLDLTHLKERNVEDLSGGELQRF
ACAVVCIQKADIFMFDEPSSYLDVKQRLKAAITIRSLINPDYIIIVVEHDLVLDYLSDFICCLYGVP SAYGVVT
MPFSVREGINIFLDGYVPTENLRFRDASLVFKVAETANEEVVKMCMYKYPGMKKKMGFE LAIVAGEFTDSEIM
VMLGENTGKTTFIRMLAGRLKPFDEGGEVPLNVSYKPKQKISPKSTGSVRQLLHEKIRDAYTHPQFVTDVMKPLQ
IENIIDQEVQTLSSGELQRVALLCLGKPADVYLIDEPSAYLDSEQRMAARVVKRFILHAKKTAFVVEHDFIMA
TYLADRVIVFDGVPSKNTVANSFQTLLAGMKNKFLSQLEITFRRDPNNYRPRINKLNSIKDVEKKSGNYFFLDD

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FIGURE 1502

AGGAAATGAGGCTGAACCTTTGTAGTGCCTCGCTAACCTTCAGACCAGTAAACCAGATGCTGTAGAGCAGACATG
TATATTGGAACTACAGAAATTGCTTTGCTTAACAACATCCCATATCATGAAGGCTTTAAATGGCAATGAGCAA
AGTTTTGTCTTCACTGACTCCAGAGAACTGTATCAGACCATGGATACCTCACTGTCAGAATGAGATGAGCTCTGG
AACTGGACAGAGTAATACTGTACAGAACATCCTTGAACCTTTCTACGTGTAGATGTGCCGAAGGCTTCTCTGT
TCTGCCTGTTATTGCTGGCACACTTGGGCAGGTAAACCATACAGTTCTGTGGAGAAAGACCAGCATCGTATTGT
TCTGGACCTCATATCTGAAGCCAATCACTTTCCTAAAGAAAACCTTGAGTTTTGGCTGAGACATGTGGAGGATGA
ATCTGCTATGTTACAAAGGCCAAAATCAGACAAGTTATGGAGCATAAATTATATTGGATGTCATTGAGCCATCTGG
GCTCATTACGACAGGAAATAATGGAAAAGCTGCAATATCCAGGTGTTTACTACAATCTGGAGGCAAGATCCTTCC
TCAGTATGTCTGATGTTTGGGTTGCTTGTGGAATCAGACACTCCTAGAGGAGAATGCTGTTCAAGGAACAGAGA
ACGTACTCTTGGATTAATATAGCACCTTTTATTAAACAGTTTCAGGTACCTATACGTGTATTTTTGGACCTATC
CTCATTGCCCTGTATACCTTTAAGCAAGCCAGTGGAACTCTTAAGACTAGATTTAATGACTCCGTATTTGAACAC
CTCTAACAGAGAAGTAAAGGTATACGTTTGTAAATCTGGAAGACTGACTGCTATTCCATTTTGGTATCATATGTA
CCTTGATGAAGAGATTAGTTGGATACCTCAAGTGAAGCCTCCCACTGGAAACAAGCTGCAGTTGTTTTAGATAA
TCCCATCCAGTTGAAATGGGAGAGGAACTTGTA CT CAGCATT CAGCAT CACAAAAGCAATGTCAGCATCACAGT
AAAGCAATGAAGAGCAGTTTCCCAATGAAAACCTGTGTAATAGAGCATCAACAGTACAAAATTCCTGTCTTAAT
TAGTGGGGGTATATAAAATTCCTTGAATGGTCAAAATTTTTTAAATTGACATTAATAAGCATATTTTAAA
AGATTCTAAATAAAAGGGTAGCATTATTATAGAAATACTGCTGCAGATTGCTTTCTGGAAAAGGATACATCACT
AGTTTTTTAAATTAGGAAACTTCTTTTGCTCGATTTTACAGAATAGGGATTTTAAAAGTCCTTACGTTATTGACA
TGTGTAAGTAAAGCAAACTTTACTTTTGTAGGCATCTTGGCCTTTTTTCTTAAATCCAACTTGTAATTTGGGAA
ACACTGAAAGGCTTCCACTGAAGACTGAGGGTTATGGTTACCTGTAAATCCAACTTGTCTTCTTTAAATACTC
AGTGATACCTGAAACATCTCAGGTTTGTGTTTGAAGATGCAAGCTTGAAAAGAAATTAAGCTATAAGCTAAAT
GTAATTAACAGTAAGAGGAGTTAGGGAATACATCTTCAGGAGGCAGCATTTTTCTTGGTCTACTTTTGCAAAAAG
AACATTTAAAAGCTGGTAACAAAACAAAGTTAAATGAAGGAAGACTTAATCCTATATACTATTTTCAAAGTTTTG
ATTTGGATGTACAATAAGTACATTAAATTGATCCAATTTTACAAACTTTTGAATAAAGGAAGATCATTATTATG
CCTCCT

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FIGURE 1503

MAMSKVLSSLIPEKLYQTM DTHCQNE MSSGTGQSN TVQNILEPFFVLDVSEGF SVLPVIAGTLGQVKPYSSVEKD
QHRIALDLISEANHFPKETLEFWLRHVEDESA MLQRPKS DKLWSII ILDVIEPSGLIQQE IMEKAAISRCLLQSG
GKIFPQYVLMFGLLVESQTLLEENAVQGTERTLGLNIAPFINQFQVPIRVFLDLSSLP CIPLSKPVELLRLDLMT
PYLNTS NREVKVYVCKSGRLTAIPFWYHMYLDEEIRLDT SSEASHWKQA AAVLDNPIQVEMGEELVLSIQHHKSN
VSIIVKQ

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[illegible]

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FIGURE 1505

MIAAQAKLVYQLNKYYTERCQARKAAIAKTIREVCKVVSVDVLKEVEVQEPFISLSEIDARYEGLEVISPTFEF
VVLYLNQMGVFNFVDDGSLPGCAVLKLSGKRKRSMSLWVEFITASGYLSARKIRSRFQTLVAQAVDKCSYRDVVK
MIADTSEVKLRIRERYVVQITPAFKCTGIWPRSAQWPMPHIPWPGPNRVAEVKAEGFNLLSKECYSLTGKQSSA
ESDAWVLQFGEAENRLLMGGCRNKCLSVLKTLDRLHLELFGQPLNNYHMKTLLEYECKHPRETDWDESCLGDR
NGILLQLISCLQCRRCPHYFLPNLDLFGGKPHSALESAAQTWRLAREILTNPKSLDKL

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FIGURE 1506

CGCGACTCCCACTTCGCCCTTTTGGCTCTGTGACCAGCACCATGGCGGTTGGCAAGAAACAAGCGCCTTACGAAA
GGCGGCAAAAAGGGAGCCAAAGAAGAAAGTGGTTGATCCATTTTCTAAGAAAGATTGGTATGATGTGAAAGCACCT
GCTATGTTCAATATAAGAAATATTGGAAAGACGCTCGTCACCAGGACCCAAAGGAACCAAAATTGCATCTGATGGT
CTCAAGGGTCGTGTGTTTGAAGTGAGTCTTGCTGATTTCAGAAATGATGAAGTTGCATTATAGAAAATTCAGGCTG
ATTACTGAAGATGTTTCAGGGTAAAACTGCCCTGACTAACTTCCATGGCATGGATCTTACCCGTGACAAAATGTGT
TCCATGGTCAAAAAATGGCAGACAATGATTGAAGCTCACGTTGATGTCAAGACTACCGATGGTTACTTGCTTCGT
CTGTTCTGTGTGGTTTTACTAAAAACGCAACAATCAGATACGGAAGACCTCTTATGCTCAGCACCAACAGGTC
CGCCAAATCCGGAAGAAGATGATGGAAATCATGACCCGAGAGGTGCAGACAAATGACTTGAAAGAAGTGGTCAAT
AAATTGATTCCAGACAGCATTTGAAAAAGACATAGAAAAGGCTTGCCAATCTATTATCCTCTCCATGATGTC TTC
GTTAGAAAAGTAAAAATGCTGAAGAAGCCCAAGTTTGAATTGGGAAAGCTCATGGAGCTTCATGGTGAAGCGCAGT
AGTTCTGGAAGAGCCACTGGGGACGAGACAGGTGCTAAAGTTGAACGAGCTGATGGATATGAACCACCAGTCCAA
GAATCTGTTTAAAGTTTCAGACTTCAAAATAGTGGCAATAAAAAAGTGCTATTGTTGATGGTTTGCTTCTGAAAAAA
AAAAAAAAAAAAAAAAAAAAA

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FIGURE 1507

MAVGKNKRLTKGGKKGAKKKVVDPFSSKDWYDVKAPAMFNIRNIGKTLVTRTQGTKIASDGLKGRVFEVSLADLQ
NDEVAFRKFKLITEDVQGNCLTNFHGMDLTRDKMCSMVKKWQTMIEAHVDVKTIDGYLLRLFCVGFTRKRNNQI
RKTSYAQHQVVRQIRKKMMEIMTREVQTNDLKEVVNKLIPDSIGKDIEKACQSIYPLHDVFVRKVKMLKKPKFEL
GKLMELHGESSSGKATGDETGAKVERADGYEPPVQESV

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FIGURE 1508

AAGTCTACATGAAAAGGATGGTTTCTTGGAGCTCCACAACCTTAAACCATGAAACATCTATTATTGCTACTAT
TGTGTGTTTTTCTAGTTAAGTCCCAAGGTGTCAACGCAATGAGGAGGGTTTCTTCAGTGCCCGTGGTCATCGAC
CCCTTGACAAGAGAGAGAAGAGGCTCCAGCCTGAGGCCTGCCCAACGCCCATCAGTGGAGGTGGCTATCGGG
CTCGTCCAGCCAAAGCAGCTGCCACTCAAAGAAAGTAGAAAGAAAGGCCCTGATGCTGGAGGCTGCTTTCACG
CTGACCCAGACCTGGGGGTGTTGTGTCTACAGGATGTCAGTTGCAAGAGGCTTTGCTACAACAGGAAAGGCCAA
TCAGAAATAGTGTGTAGTGAATAACAATGTGGAAGCTGTTCCCGAGACCTCCTCTTCTTCTTTCAGTACA
TGATTATTGCTGAAAGACCTGTGGCAAAGAGGCAGAGCAAGTAAAGATAATGAAAATGTAGTCAATGAGTACT
CCTCAGAACTGGAAAAGCACCAATTATATATAGATGAGACTGTGAATAGCAATATCGCAACTAACCTTCGTGTGC
TTCGTTCACTCTAGAAAACCTGAGAAGCAAAATACAAAAGTTAGAATCTGATGCTCAGCTCAAATGGAAATATT
GTCGCACCCCATGCACCTGTCAGTTGCAATATTCTGTGGTGTCTGGCAAAGAAATGTGAGGAAATTTATCAGGAAAG
GAGGTGAAACATCTGAAATGTATCTCATTCAACCTGACAGTTCTGTCAAACCGTATAGAGTACTGTGACATGA
ATACAGAAAATGGAGGATGGACAGTGATTGAGAACCGTCAAGACGGTATGTTGACCTTTGGCAGGAAATGGGATC
CATATAAACAGGGATTGGAAATGTTGCAACCAACACAGATGGGAAGAATTACTGTGGCCTACCAGGTGAATATT
GGCTTGGAAATGATAAAATAGCCAGCTTACCAGGATGGGACCCACAGAACTTTTGATAGAAATGGAGGACTGGA
AAGGAGACAAAGTAAAGGCTCAGTATGGAGGATTCAGTGACAGAAATGAAGCCAAACAAATACCAGATCTCAGTGA
ACAAATACAGAGGAACAGCCGGTAATGCCCTCATGGATGGAGCACTCAGCTGATGGGAGAAAACAGGACCATGA
CCATTACAAACGGCATGTTCTTCAGCAGCTATGACAGAGACAATGACGGCTGGTTAATCATCAGATCCCAGAAAAAC
AGTGTTCTAAAGAAAGACGGTGGTGGATGGTGGTATATAGATGTCATGACGCCAATCCAAACGGCAGATACTACT
GGGGTGGACAGTACACCTGGGACATGGCAAAGCATGGCACAGATGATGGTGTAGTATGGATGAATTTGAAGGGGT
CATGTGACTCAATGAGGAAGATGAGTATGAAGATCAGGCCCTTCTTCCACAGCAATAGTCCCCAATACGTAGAT
TTTTGCTCTTCTGTATGTGACAACATTTTGTACATTATGTTATTGGAATTTCTTTCATACATTTATTTCTCT
AAAACCTCTCAAGCAGACGTGAGTGTGACITTTTGAAAAAGTATAGGATAAATTACATTAATAATAGCATGATT
TTCCTTTGTTTTCTTCATTTCTCTGCTCACAAGAAGTAAACAAAGTATAGTTTGTACAGAGTTGGTGTTCATA
ATTTGAGTTCTAGTTGATTGCGAGAATTTCAATAAGGAAGAGGGGTCTTTTATCCTTGTCTAGGAAAACCAT
GACGGAAAGGAAAACTGATGTTTAAAGTCCACTTTTAAACTATATTTATTTATGTAGGATCTGTCAAAGAAA
ACCTTCCAAAAGATTATTAATTAACCCAGACTCTGTTGCAAT

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FIGURE 1509

MKRMVSWSFHKLKTMKHLLLLLLCVFLVKSQGVNDNEEGFFSARGHRPLDKKREEAPSLRPAPPPISGGGYRARP
AKAAATQKKVERKAPDAGGCLHADPDLGVLCPTGCQLQEALLQQERP IRNSVDELNNNVEAVSQTSSSSFQYMYL
LKDLWQKRQKQVKDNENVVNEYSSELEKHQLYIDETVNSNIATNLRVLRSILENLRSKIQKLES DVSAQMEYCRT
PCTVSCNIPVVS GKECEEIIRKGETSEMYLIQPDSSVKPYRVYCDMNTENGGWIVIQNRQDGSVDFGRKWDPYK
QGFGNVATNTDGKNYCGLPGEYWLGN DKISQLTRMGPELLIEMEDWKGD KVKAHYGGFTVQNEANKYQISVNKY
RGTAGNALMDGASQLMGENRTMTIHNGMFFSTYDRDNDGWLTS DPRKQCSKEDGGGWYNRCHAANPNGRY YWGG
QYTWDMAKHGTD DGVVWMNWKGSWYSMRKMSMKIRPFFPQQ

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FIGURE 1510

CTACATGAAAAGGATGGTTTCTTGGAGCTTCCACAACTTAAACCATGAAACATCTATTATTGCTACTATTGTG
TGTTTTTCTAGITTAAGTCCCAAGGTGTCAACGACAATGAGGAGGTGAATTTTTTAAAGCATTATTATATTATTAG
TAGTATTATTAATATAAGATGTAACATAATCATATTATGTGCTTATTTTAAATGAAATTAGCATTGCTTATAGTTA
TGAAATGGAATIGTTAACCTCTGACTTATTGTATTTAAAGAATGTTTCATAGTATTTCTTATATAAGATGGCTTA
GCTAATGTAAGATGTGTTTTTCTCACTTGCTATTCTGAGTACTGTGATTTTCATTTACTTCTAGCAATACAGG

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FIGURE 1511A

GTCTAGGAGCCAGCCACCCTTAGAAAAGATGTTTTCATGAGGATCGTCTGCCTAGTTCTAAGTGTGGTGGC
ACAGACTGGACTGCAGATAGTGGTGAAGTGTACTTCTAGCTGAAGGAGGAGGCGTGCCTGGCCCAAGGGTTGTG
GAAAGACATCAATCTGCTGCGAAGATTACAGACTGGCCCTCTGCTCTGATGAAGACTGGAACTCAAAATGCCCT
TCTGGCTGCAGGATGAAAGGGTTGATTGATGAAGTCAATCAAGATTTTACAAACAGATAAATAGCTCAAAAT
TCACATATTTGAATATCAGAAAGAACATAAGGATTCTCATTGTTGACCACTAATAATAGGAAATTTTGAGAGGC
GATTTTTCTCAGCCCAATAACCGTGATAATACCTACAAACCGAGTCTCAGAGGATCTGAGAAAGCAGAAATTTGAAGTC
CTGAAGCGCAAGATCATAGAAAAAGTACAGCATATCCAGCTTCTGCAGAAAAATGTTAGAGCTCAGTTGGTTGAT
ATGAAACGACTGGAGGTGGACATTGATATTAAGATCCGATCTTGTCGAGGGTTCAGCATAGGGCTTTAGCTCGT
GAAGTAGATCTGAAGGACTATGAAGATCAGCAGAAGCACTTGAACAGGTCATTGCCAAGACTTACTTCCTCT
AGAGATAGGCCAACACTTACCCTGATAAAAAATGAAACCAAGTTCAGACTTGGTTCGCCGAAATTTTAAGAGCCAG
CTTCAGAAAGGTACCCAGAGTGGAAAGCATTAAACAGACATGCCGCAGATGAGAATGGAGTTAGAGAGACCTGGT
GGAAATGAGATTACTCGAGGAGGCTCCACCTCTTATGGAACCGGATCAGAGACGGAAAGCCCCAGGAACCTTAGC
AGTGTGGAAGCTGGAACCTCTGGGAGCTCTGGACCTGGAAGTACTGGAACCCGAAACCTTGGGAGCTCTGGACT
GGAGGAGCTGCAACCTGGAAACCTGGGAGCTCTGGACCTGGAAGTACTGGAAGCTGGAACCTCTGGGAGCTCTGGA
ACTGGAAGTACTGGAAGCAAAACCTCTGGGAGCCCTAGACCTGGTAGTACCCGAACTGGAATCTCTGGCAGCTCT
GAAACCGAGTCTGCGGCACCTGAGAGCTCTGAGAGCTCTGTATCTGGTAGTACTGGACAAATGGCACTCTGAATCT
GGAAGTTTTAGGCCAGATAGCCAGGCTCTGGGAACGCGAGGCTTAACAACCCAGACTGGGGCACATTTGAAGAG
GTGTGAGGAATGTAAGTCCAGGGACAAGGAGAGATACCAACACAGAAAATCTGTCACTCTAAAGGAGATAAA
GAGCTCAGGACTCGTAAAGAGAAGGTCACTCTGGTAGCAACACCCAGCCGCTGTTATGCTCTAAACCCGTT
ACTAAGACTGTAATGGTCTGATGGTCAAGAAAGTTACCAAGAAAGTGGTAGCTCCGAGATGTTCTCTGAC
TGTCGCCGAGGCAATGGATTAGGCCAATTGCTCGGCATAGGTACTCTGGAATGGGTTCCGCCATAGGCACCTGAT
GAAGCTGCTCTCTCGACACTGCTCAACTGGAAACATTCCAGGTTTCTCTCACCTATGTTAGGAGAGTTT
GTCAGTAGACTGAGTCTAGGGGCTCAGAACTCTGGCATCTTCAAAATACAAAGGAATCCAGTTCATCATCCCT
GGGATCTGAATGAAATCCCTTCCCTGGGCAATCTTCAAGTTACAGCAACAAATTTACTAGTAGACAGGTTTACAAC
AGAGGAGACTTCCAGATTTGAAACAGAGACTATAAAATGGCAGATGAGGCCGGAAGTGAAGCCGATCATGAAGGA
ACACATAGCACCAAGAGAGGCGATGCTAAATCTCGCCCTGTGACAGACTGTGATGATGTCTCCAAACACATCTCT
TCAGGTACCCAAAGTGGCATTTTCAATATCAAGCTACCCGGATCCAGTAAGATTTTTCTGTTTATTCGGATCAA
GAGACCAGTTTGGGAGGATGGCTTTTGATCCAGCAAGAAATGGATGGATCACTGAATTTTAAACCGGACCTGGCAA
GACTACAAGAGAGGTTTCGGCAGCCTGAAATGACGAGGGGGGAAGGAGAATTTCTGGCTAGGCAATGACCTCCAC
TTACTAACCCAAAGGGGCTCTGTTCTTAGGGTTGAATTAGAGGACTGGGCTGGGAATGAAGCTTATGAGCAATAT
CACTTCCGGGTAGGCTCTGAGGCTGAAGGCTATGCCCTCCAAGTCTCTCCTATGAAGGCACTGGGGGTGATGCT
CTGATTGAGGGTTCCGTAGAGGAAGGGGACAGTACACCTCTCACAAACATGCAGTTCAGCACCTTTGACAGG
GATGCAGACCAAGTGGGAAGAGAACTGTGCAGAAGTCTATGGGGGAGGCTGGTGGTATAATAACTGCCAAGCAGCC
AATCTAAATGAAATCTACTTCCCTGGGGGCTCTATGACCAAGGAATAACAGTCTCTATGAGATTGAGCAATGGA
GTGGTCTGGGTTTCTTTAGAGGGGAGATATTCCCTCAGGGCTGTTGCGATGAAAATAGGCCCTTTGTGACC
CAATAGGCTGAAGAAGTGGGAATGGGAGCACCTGTGCTTCTTGCTAGAGAAGTGGAGAGAAATACAAAAGGTA
AAGCAATGAGATTCTTACACACTTAAATACTCTAGGTGCTATTTCTATCTCTGTAGCTAGCTAAATGT
ACCTGAGACATATTAGTCTTTGAAAAATAAAGTTATGTAAGGTTTTTTTATCTTTAAATAGCTCTGTGGGTTTT
AACATTTTTGAAAAGATACCAAGGGCCATTTCAGTACATCAGGAAGTGGCAGACAGAGCTTCTCTGCAAC
CTTGAAGACTATTGGTTTGAGAACTTCTCTCCCATACCACCCAAATCATATGCCATTGGAAGCAAAAAGTT
GTTTTATCCATTTGATTTGAATTTGTTTTAAGCCAAATTTTTAAGGTAAAACCTCACTGAATCTAACCATAGTGCAC
CTTTGTAGTAGAATTTACAACCTTATAATTACAATGCACAAATTTATAATTACAATATGATTTATGTTTTGCTTA
TGGAGCAAAATCCAGGAAGGCAAGAAACATTTCTTCTTAATAATAAATGAAATCTATCCTTTAAATCTTTCCA
CTAGACGTTGTAATGCACATTTATTTTTCCCAAGGAGTAACCAATTTCTTTCAAAACACATTTCTCTGCAAC
AAACTATTTATGAATATTAATAAAGACATAATTCACACATTAATAAACAACTCTCCAAGTATTGATTTAACTTC
ATTTCTTAATAATCATAACTATATCTGTGACATGCTAATTTATTAATAGTAAAGCGTTAGTTCGAAAGGCC
TCTCAAGTATGATCTATGCTATATTTCAAAATCAACCCATTTACTTTGGTCAATATTGATCTAGATTTGATCAT
CTTTAATCCTGGTGGTCTGCTCTGATTTTTTAATTGTATCCTTTCTTAATAGATATATTGTCACTTTTCTC

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FIGURE 1511B

TTGAATATGTATTAAAAATATCCCAAGC

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FIGURE 1512

MFSMRIVCLVLSVVGTAWTADSGEGDFLAEGGGVGRPRVVERHQSAACKDSDFCSDDEDWNYKCPSGCRMKGLED
EVNQDFTNRINKLNKSLFEYQKNNKDSHSLTTNIMEILRGDFSSANNRDNTYNRVSEDLRSRIEVLKRKVKIEKVQ
HIQLLQKNVRAQLVDMKRLEVDIDIKIRSCRGSCSRALAREVDLKDIEDQKQLEQVIAKDLLPSRDRQHFLPLIK
MKPVPDLVPGNFKSQLQKVPEWKALTDMPQMRMELERPGGNEITRGGSTSYGTGSETESPRNPSSAGSWNSGSS
GPGSTGNRNPSSSGTGCTATWKPGSSGPGSTGSWNSGSSGTGTGNQNPGPSRPGSTGTWNPSSSERGSAGHWTS
ESSVSGSTGQWHSSESGFRPDSPGSGNARPNPDWGTFFEEVSGNVSPGTRREYHTEKLVTSKGDKELRITGKEKVT
SGSTTTTTRRSCSKTVTKTVIGPDGHKEVTKEVVTSEDDGSDCPEAMDGLTSLSGIGITLDGFRHRHPDEAAFFDTAST
GKTFPGFFSPMLGEFVSETESRGSESGIFNTKESSSHHPGIAEFPSRGKSSSYKQFTSSTSYNRGDSFTFESKS
YKMADEAGSEADHEGHTHSTKRGHAKSRPVRDCCDVLQTHPSGTQSGIFNKLPGSSKIFSVYCDQETSLGGWLLI
QQRMDGSLNFRNRTWQDYKRFGSLNDEGEGEFWLGNLDYLHLLTQRGSVLRVELEDWAGNEAYAEYHFRVSGEAE
YALQVSSYEGTAGDALIEGSVEEGAETSHNNMQFSTFDRDADQWEENCAEVYGGGWYNNCQAANLNGIYYPGG
SYDPRNNSPYEIEGVVWVSFRGADYSLRAVRMKIRPLVTQ

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FIGURE 1513

GTCTAGGAGCCAGCCCCACCCTTAGAAAAATGTTTTCATGAGGATCGTCTGCCTAGTTCTAAGTGTGGTGGGG
ACAGCATGGACTGCAGATAGTGGTGAAGGTGACTTTCAGCTGAAGGAGGAGGCGTGCCTGGCCCAAGGGTTGTG
GAAAGACATCAATCTGCCTGCAAAAGATTACAGACTGCCCTTCTGCTCTGATGAAGACTGGAACATACAAATGCCCT
TCTGGCTGCAGGATGAAAGGGTTGATTGATGAAGTCAATCAAGATTTTACAAACAGAAATAAATAGCTCAAAAAT
TCACTATTTGAATATCAGAAGAACAATAAGGATTCTCATTCTGTTGACCACTAATAATAATGGAATTTTGAGAGGC
GATTTTTCTCAGCCAATAACCGTGATAATACCTACACCCAGTGTCTGAGGATCTGAGAAGCAGAAATTGAAGTC
CTGAAGCGCAAAGTCATAGAAAAAGTACAGCATATCCAGCTTCTGCAGAAAAATGTTAGAGCTCAGTTGGTTGAT
ATGAACGACTGGAGGTGGACATTGATATTAAGATCCGATCTTGTGAGGGGTCTGCAGTAGGGCTTTAGCTCGT
GAAGTAGACTGAAGGACTATGAAGATCAGCAGAAGCAACTTGAACAGGTCATTGCCAAAGACTTACTTCCCTCT
AGAGATAGGCAACACTTACCCTGTATAAAAAATGAAACCAGTTCAGACTTGGTTCGCCGAAATTTTAAAGGCCAG
CTTCAGAAGGTACCCCCAGAGTGGGAAGGCATTAAACAGACATGCCGCAGATGAGAATGGAGTTAGAGAGACCTGGT
GGAAATGAGATTACTCGAGGAGGCTCCACCTCTTATGGAACCGGATCAGAGACGGAAAGCCCCAGGAACCCTAGC
AGTGTGGAAGCTGGAACCTCTGGGAGCTCTGGACCTGGAAGTACTGGAACCGCAAAACCCCTGGGAGCTCTGGGACT
GGAGGGACTGCAACCTGGAACCTGGGAGCTCTGGACCTGGAAGTACTGGAAGCTGGAACCTCTGGGAGCTCTGGA
ACTGGAAGTACTGGAACCAAAACCCCTGGGAGCCCTAGACCTGGTAGTACCGGAACCTGGAATCCTGGCAGCTCT
GAACGCGGAAGTGTGGGCACTGGACCTCTGAGAGCTCTGTATCTGGTAGTACTGGACAAATGGCACTCTGAATCT
GGAAGTTTATAGCCAGATAGCCCCAGGCTCTGGGAACGCGAGGCCATAACAACCCAGACTGGGGCAGATTGAAGAG
GTGTCAAGGAAAATGAAGTCAGGGGCAAGGAGAGAGTACCACACAGAAAACTGGTCACTTCTAAAGGAGATAAA
GAGCTCAGGACTGGTAAAGGAGAGGTACCTCTGGTAGCACACCACCGCGTCTGTTATGCTCTAAAACCGTT
ACTAAGACTGTTATTGGTCTCTGATGGTCACAAAGAAGTTACCAAGAAAGTGGTGAACCTCCGAAGATGGTTCTGAC
TGTCGCCGAGGCAATGGATTTAGGCACATTGTCTGGCATAGGTACTCTGGATGGGTTCCGCCATAGGCACCCGTGAT
GAAGCTGCCTCTTCTGCAGACTGCCTCAACTGGAAAAAATTCACAGGTTTCTTCTCACTATGTTAGGAGAGTTT
GTCAGTGAGACTGAGTCTAGGGGCTCAGAACTCTGGCATCTTCAAAATACAAAGGAATCCAGTTCTCATCACCCCT
GGGATAGCTGAATTCCTTCCCGTGGTAAATCTTCAAGTTACAGCAAAACATTTACTAGTAGCACAGGTACAAAC
AGAGGAGACTCCACATTTGAAAGCAAGAGCTATAAAATGGCAGATGAGGCCGGAAGTGAAGCCGATCATGAAGGA
ACACATAGCACCAAGAGAGGCCATGTCTAAATCTCGCCCTGTACAGAGGTATCCACACTTCTCCTTTGGGGAGCCCT
TCCCTGTCCCCCTAGACTAAGTTAAATATTTCTGCACAGTGTTCACATGGCCCTTGATTTTCTTCTTAACCTCT
CTGTTACAGCTCATCTGAACTACACTTTTTTGGTCTGTTTTTGTGCTAGACTGTAAAGTTCTTTGGGGGACGGCC
TTTGTCTGTCTCATTCTGATTTCCTCCAAATGCTACAGTACAGAGCCATGACTCAATAAATACATGTTAAATGG
ATGAATG

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FIGURE 1514

MFSMRIVCLVLSVVGTAWTADSGEGDFLAEGGGVRGPRVVERHQSAKDSDWPFCSDEDWNYKCPSGCRMKGILID
EVNQDFTNRINKLNSLFYQKNNKDSHSLTTNIMEILRGDFSSANNRDNTYNRVSEDLRSRIEVLKRKVEIKVQ
HIQLLKQNVRAQLVDMKRLEVDIDIKIRSCRGSCSRALAREVDLKDYEDQKQLEQVIAKDLLPSRDRQHLP
MKPVVDLVPGNFKSQLQKVPEWKALDMPQMRMELERPGGNEITRGGSTSYGTGSETESPRNPSSAGSWNSGSS
GPGSTGNRNPGSSGTCGTATWKP GSSGPGSTGCSWNSGSSGTGTCNQNP GSPRGSTGTWNPGSSERGSAGHWTS
ESSVSGSTGQWHSESGSFRPDSPGSGNARPNPDWGTFFEEVSGNVSPGTRREYHTEKLVTSKGDKELRITGKEKVT
SGSTITTRRSCSKTVIKTVIGPDGHKEVTKEVVTSEDCPEAMD LGT LSGIGTLDGFRHRHPDEAAFFDTAST
GKTTFPGFFSPMLGEFVSETESRGSESGIFTNKESSSHHPGIAEFPSRGKSSSYKQFTSSSTSYNRGDSITFESKS
YKMADEAGSEADHEGTHSTKRGHAKSRPVIRGIHTSPLGKPSLSP

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FIGURE 1515

TGCTGACACTACAAGGCTCGGAGCTCCGGGCACTCAGACATCATGAGTTGGTCCTTGCACCCCGGAATTTAATT
CTCTACTTCTATGCTCTTTTATTCTCTCTTCAACATGTTAGCATATGTTGCTACCAAGACAACTGCTGCATC
TTAGATGAAAGATTCCGTTAGTTATTGTCCAACCTACCTGGGCATTGCAGATTTCTGTCTACTTATCAAACCAA
GTAGACAAGGATCTACAGTCTTTGGGAAGACATCTTACATCAAGTTGAAAACAAAACATCAGAAGTCAACAGCTG
ATAAAAGCAATCCAACCTCACTTATAATCCTGATGAATCATCAAAACCAAATATGATAGACGCTGCTACTTTGAAG
TCCAGGATAATGTTAGAAGAAATTATGAATATGAAGCATCGATTTTAACACATGACTCAAGTATTCGATATTG
CAGGAAATATATAATTCAAATAATCAAAGATTGTTAACCTGAAAGAGAAGGTAGCCCACTTGAAGCACAGTGC
CAGGAACCTTGCAAAGACACGGTGCAAATCCATGATATCACTGGGAAAGATTGTCAAGACATTGCCAATAAGGGA
GCTAAACAGAGCGGGCTTTACTTTATTAACCTCTGAAAGCTAACCAGCAATTCCTAGTCTACTGTGAAATCGAT
GGGCTCGAAATGGATGGACTGTGTTTCAGAAGAGACTTGATGGCAGGTAGATTTCAAGAAAACCTGGATTCAA
TATAAAGAAGGATTGGACATCTGTCTCCTACTGGCACAACAGAATTTGGCTGGGAATGAGAAGATTCATTGG
ATAAGCACACAGTCTGCCATCCCATATGCATTAAAGAGTGGAACTGGAAGACTGGAATGGCAGAACCACTACTGCA
GACTATGCCATGTTCAAGTGGGACCTGAAGCTGACAAGTACCGCCTAACATATGCCTACTTCGCTGGTGGGGAT
GCTGGAGATGCTTTTGATGGCTTTGATTTTGGCGATGATCCTAGTGACAAGTTTTCACATCCCATATATGGCATG
CAGTTCACTACCTGGGCAATGACAATGATAAGTTTGAAGGCACTGTGCTGAACAGGATGGATCTGGTTGGTGG
ATGAACAAGTGTACGCTGGCCATCTCAATGGAGTTTATTACCAAGGTGGCACTTACTCAAAGCATCTACTCCT
AATGGTTATGATAATGGCATTATTGGGCCACTTGGAAAACCCGGTGGTATTCATGAAGAAAACCATATGAAG
ATAATCCCATTCACAGACTCACAATTGGAGAAGGACAGCAACACCACCTGGGGGGGCAACACAGGCTGGAGAC
GTTTAAAGACCGTTTCAAAGAGATTTACTTTTTAAAGGACTTTATCTGAACAGAGATATAATATTTTCC
TATTGGACATGGACTTGCAAGCTTCACTTCATTTTAAGAGCAAAAGACCCATGTTGAAAACCTCCATAACAGT
TTTATGCTGATGATAATTTATCTACATGCATTTCAATAAACCTTTTGTTCCTAAGACT

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FIGURE 1516

MSWSLHPRNLILYFYALLFLSSTCVAYVATRDNCCILDERFGSYCPTTCGIADFLSTYQTKVKDLQSLLEDILHQ
VENKTSEVKQLIKAIQLTYNPDESSKPNMIDAATLKSRIMLEEIMKYEASILTHDSSIRYLQEIYNSNNQKIVNL
KEKVAQLEAQCQEPCKDTVQIHDIHGKDCQDIANKGAKQSGLYFIKPLKANQQFLVYCEIDGSGNGWTVFQKRRLD
GSVDFKKNWIQYKEGFGHLSPITGTEFWLGNEKIHLISTQSAIPYALRVELEDWNGRTSTADYAMFKVGPADKY
RLTYAYFAGGDAGDAFDGFDGDDPSDKFFTSHNMQFSTWDNDNDKFEQNCAEQDQSGGWMMNKCHAGHLNGVY
QGGTYSKASTPNGYDNGIIWATWKTRWYSMKKTTMKIIPFNRLTIGEGQQHHLGGAKQAGDV

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FIGURE 1517

TGCTGACACTACAAGGCTCGGAGCTCCGGGCACTCAGACATCATGAGTTGGTCCCTTGACCCCCGGAATTTAATT
CTCTACTTCTATGCTCTTTTATTTCCTCTTCAACATGTGTAGCATATGTTGCTACCAGAGACAACCTGCTGCATC
TTAGATGAAAGATTCGGTAGTTATTGTCCAACCTACCTGTGGCATTGCAGATTTCTGTCTACTTTATCAAAACAAA
GTAGACAAGGATCTACAGTCTTTGGAAGACATCTTACATCAAGTTGAAACAAAACATCAGAAGTCAAAACAGCTG
ATAAAAGCAATCCAACCTCACTTATAATCCTGATGAATCATCAAACCAAATATGATAGACGCTGCTACTTTGAAG
TCCAGGATAATGTTAGAAGAAATTATGAAATATGAAGCATCGATTTTAAACATGACTCAAGTATTCGATATTTG
CAGGAAATATATAATTCAAATAATCAAAGATTGTTAACTGAAAGAGAAGGTAGCCACAGTTGAAGCAGATGC
CAGGAACCTTGCAAAGACACGGTGCAAATCCATGATATCACTGGGAAAGATTGTCAAGACATTGCCAATAAGGGA
GCTAAACAGAGCGGGCTTTACTTTATTAACCTCTGAAAGCTAACCAAGCAATCTTAGTCTACTGTGAAATCGAT
GGGCTGGAATGGATGGACTGTGTTTTCAGAAAGAGACTTGATGGCAGTGTAGATTTCAAGAAAACTGGATTCAA
TATAAAGAAGGATTTGGACATCTGTCTCCTACTGGCACAACAGAATTTTGGCTGGGAAATGAGAAGATTCAATTTG
ATAAGCACACAGTCTGCCATCCCATATGCATTAAAGAGTGGAACTGGAAGACTGGAATGGCAGAACCAGTACTGCA
GACTATGCCATGTTCAAGGTGGGACCTGAAGCTGACAAGTACCGCTAACATATGCCTACTTCGCTGGTGGGGAT
GCTGGAGATGCCTTTGATGGCTTTGATTTTGGCGATGATCCTAGTGACAAGTTTTTCACATCCCATATATGGCATG
CAGTTCACTACCTGGGCAATGACAATGATAAGTTTGAAGGCAACTGTGCTGAACAGGATGGATCTGGTTGGTGG
ATGAACAAGTGTCACGCTGGCCATCTCAATGGAGTTTATTACCAAGGTGGCACTTACTCAAAAGCATCTACTCCT
AATGGTTATGATAATGGCATTATTTGGGCCACTTGGAAAACCCGGTGGTATTCATGAAGAAAACCATATGAAG
ATAATCCCATTCACAGACTCAACAATTGGAGAAGGACAGCAACACCCTGGGGGGAGCCAAACAGGTCAGACCA
GAGCACCCCTGGGGAACAGAATATGACTCACTTTACCTGAGGATGATTTGTAGAAAAATTAAGTCTAACTTCTA
TTGACCACAAGTTTCAGAAATTCCTGAAAAGTTCTTCCCTTTTTCTCTTACTATATTTATTGATTTCAAGTC
TTCTATTAAGGACATTTAGCCTTCAATGGAAATTAAGACTCATTTAGGACTGTATTTCCAAATTAAGTATCAG
AGTTATTTAAAAATGTTTATTTGAGGAGATAACATTTCAACTTTGTCTCTAAATATATAATAATAAAATGATTG
ACTTT

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FIGURE 1518

MSWSLHPRNLILYFYALLFLSSSTCVAYVATRDNCCILDERFGSYCPTTCGIADFLSTYQTKVDKDLQSLEDILHQ
VENKTSEVKQLIKAIQLTYNPDESSKPNMIDAATLKSRLMLEEIMKYEASILTHDSSIRYLQEIYNSNNQKIVNL
KEKVAQLEAQCQEPCKDITVQIHDITGKDCQDIANKGAKQSGLYFIKPLKANQQFLVYCEIDGSGNGWTVFQKRLD
GSVDFKKNWIOYKEGFHLSPTGTTEFWLGNEKIHLSITQSAIPYALRVELEDWNGRTSTADYAMFKVGP EADKY
RLTYAYFAGGDAGDAFDGDFDGDPSDKFFTSHNGMQFSTWDNDNDKFEGNCAEQDGSWWMMNKCHAGHLNGVYY
QGGTYSKASTPNGYDNGIIWATWKTRWYSMKKTTMKIIPFNRLTIGEGQQHHLGGAKQVRPEHPAETEYDSLYPE
DDL

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FIGURE 1519

AGCAGCCGCCGCCAGACAGCCGCCGCCACCCGTTTCGCCGCTCCCCCTGCCGCATTACAAATGCAGCCTGCTTT
TGCAAAGTGGTACGATCGAAGGGACTGTGTCTTCACTGAATCTTGTGTTGAAGACAATAAGGATGTTAATGTAAA
TTTTGAAAAATCCAACTTACATTACAGTTGTCTTGGAGGAAGTGATAATTTAAGCATTTAAATGAAATTGGTCT
TTTTTACTCTATTGATCCAAATGATTCCAAGCATAAAAGAACGGACAGATCAATTTATGTTGTTTACGAAAAGG
AGAACTCTGGCCAGTCATGGCCAAGGTTAACAAAAGAAAGGGCAAAGATGATGAACAACATGGGTGGGGATGAGGA
TGTAGATTACCAGAAGTAGATGAAGCAGGTGATGATTACAAGACAGTGATGATGAAAAAATGCCAGATCTGGA
GTAAGAAATATTTATCACCCTGGATTTTGAGAAAGAAA

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FIGURE 1520

ATGGTAACCAATGTCAACCAGAATACAAGTGGAGCTCTGTCTTTARATCAACTGCCACACACTCACATGTCGAAG
ATCCAAATACCCCTTGCAAAATGCCTATCCCATTGCCAACGCTGATGCCCAAGGATGCACACACTGGCTGCGTGGG
CTGCCCTCAGAAAGATGTGCCCGAGGAGGAAAATTACTCCTGGGCACCAGTACAATTACAGTGGATCAGAGGATT
GCACTGAAAGAGGTGCAAGCTACCTGGTTACTTCACAAATATCTCTACCATACATACTATTATCGACTCAACATT
AGGGTTGTCTGTGCTCAGGACACCAGAGTAAATACTGCCCAATTCCAGAGATGTACTCCTTCTACATGTGCCCA
TGCTTCAGGCCTGAGCTCCGTGGCTACTCCATGGACACATCACTTATCAAACACCAGTGCAACCACTGCAAG
CAAGCCAAAGGCCAGATTCACTGCCAAGAGAGATTCTGGCAATCTTAGCAGAAGAAGCTCAACAAAACAAGCCC
ATCTGGACCAGAAATCCAGATGATATTACTAATGAGGAGTACAGAGAATTCTACAAGAGCTTGACTAATGACTGG
GAAGATCACTTAAAGAAAAAGAACAAATATCAAATTTGATGTATGCAGAGTTTTTCATCACGGATAACTGTGAGGAG
CTAATCCCTGAATACCTGAACCTCATTAGAGTGCTGGTAGACTCGGAGGATCTCCCTCTAAATATTTCCCATAG
ATGTTACAACAAAGCAAAATTTTGAAGTTATCAGGAAGAATTTGGTCAAAAATGCTTAGAAGCTTTTACTGAA
CTGGCAGAAGATAAAGAGAACTACAAGAAGTTCTATGAGCAGTTCTCTGAAAACATAAAGCTTGGAATACATGAA
GACTCTCAAAATCAGAAGAAGCTTTAGAGCTGTTAAGGTACTACACATCTGCCCTCTGGTGATGAGATGGTTTCT
CTCAAGGACTACTGCACCAGAATAAGGAAAAGTGAAGTGAATCTTAA

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FIGURE 1521

MVTNVNQNTSGALSLNQLPHTHMSKIQIPLANAYPIANADAQGCTHWLRGLPSERCARGGKLLLGSTITVDQRI
ALKEVQATWLLHKYLYHTYYYRLNIRVVCAQDTRVNTAPIEMYSFYMCPCFRPELRGYSMDTSLIKHCNNHCK
QANRPDSVPREILAILAEELNKTPIWTRNPDITNEEYREFYKSLINDWEDHLKKNNIKLYVCRVFI TDNCEE
LIP EYLNFI RVLVDS E DLPINIS KMLQQS KILKVIRKNLVKKCLELFTELAEDKENYKKFYEQFSENIKLGIHE
DSQNQKKLSELLRYITSASGDEMVS LKDYCTRIRKTRNES

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FIGURE 1522

GATGTGGCCCGTGGCCTAGCTCGTCAAGTTGCCGTGGCGGGAGAACTCTGCAAAAACAGAGGCTGAGGATTGCG
TTAGAGATAAACACAGTTCACGCCGAGCCCCGTGAGGGAAGCGTCTCCGTTGGGTCCGGCCGCTCTCGGGGACTC
TGAGGAAAAGCTCGCACACAGGTGGACGCGGATCTGTCAACATGGGTAAAGGAGACCCCAACAGCCGCGGGGCAA
AATGTCCCTCGTACGCCCTTCTTCGTGCAGACCTGCCGGGAAGAGCACAGAAGAAACACCCGGACTCTTCCGTCAA
TTTCGCGGAATTCTCCAAGAAGTGTTCGGAGAGATGGAAGACCATGTCTGCAAAGGAGAAGTCGAAGTTTGAAGA
TATGGCAAAAAGTGAACAAAGCTCGCTATGACAGGGAGATGAAAAATTACGTTCCCTCCCAAGGTGATAAGAAAGG
GAAGAAAAGGACCCCAATGCTCCTAAAAGGCCACCATCTGCCTTCTTCTGCTTTTGTCTGTAACATCGCCCAAA
GATCAAAAGTGAACACCCCTGGCCTATCCATTGGGGATACTGCAAGAAATTGGGTGAAATGTGGTCTGAGCAGTC
AGCCAAAGATAAACACCATATGAACAGAAAGCAGCTAAGCTAAGGAGAAATATGAAAAGGATATTGCTGCATA
TCGTGCCAAGGGCAAAAGTGAAGCAGGAAGAAGGGCCCTGGCAGGCCAACAGGCTCAAGAAGAAGAACGAACC
AGAAGATGAGGAGGAGGAGGAGGAAGAAGAAGATGAAGATGAGGAGGAAGAGGATGAAGATGAAGAAATTAATGGC
TATCCTTTAATGATGCGTGTGGAATGTGTGTGTGTCTCAGGCAATTATTTTGCTAAGAAATGTGAATTCAGTGC
AGCTCAATACTAGCTTCAGTATAAAAACTGTACAGATTTTGTATAGCTGATAAGATTCTCTGTAGAGAAAAATAC
TTTAAAAAATGCAGGTTGTAGCTTTTGTATGGGCTACTCATACAGT TAGATTTTACAGCTTCTGATGTTGAATG
TTCCATAATATTTAATGGTTTTTTAATTTCTGTGTGTATGTTAGCACAGCAAACCTGTAGGAATTAGTATCAAT
AGTAAATTTTGGGTTTTTATAGGATGTTGCATTTCGTTTTTTTAAAAAAATTTTGTAAATAAATATGTATATTA
TTTCTATTGCTTTGTCTTAATATGCTAAGTTAATTTTCACTTTAAAAAAGCCATTTGAAGACCAAAAAAATAA
AA

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FIGURE 1523

MGKGDPNKPGRKMSSYAFFVQTCREEHKKKHPDSSVNFAEFSKKCSEWRKMTMSAKEKSKFEDMAKSDKARYDREM
KNYVPPKGDKKKKKDPNAPKRPPSAFFLFCSEHRPKIKSEHPGLSIGDTAKKLGEMWSEQSAKDKQPYEQKAAK
LKEKYEKIDIAAYRAKGKSEAGKKGPGRPTGSKKKNEPEDEEEEEEEEEDEEEEEDEDEE

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FIGURE 1524

CAGCCCCCTCTGCGGCTGCCGGCGGGGCCCGGGCGCCCGGGGCTGGGGGTGGGGGTGGGGAGGACGCCGAG
CGCTGAGGCAGGGGCCCGGGCCGAGGGCGCGGCGGGGCTGCGCGCACGCTGGGGCGCTGGAGGGCGCGGAGGG
CGAAATGAGTCTGGTAGGTGGTTTTCCACCACCCGGTGGTGACACAGAGGGCTACCCGTTTGGCGCGCGCG
CGCCGCAGTCTGCCCGCCCGCCGCGCAGCCGCTGAGCCATGAGGAGAACCCCTACTTCCATGGCTGGCTCATCGG
CCACCCCCGAGATGTCGCCCCCGACTACAGCATGGCCCTGTCTACAGCCCCGAGTATGCCAGCGGCGCGCGCGG
CCTGGACCATTCCCAITACGGGGGGGTGCCGCGGGGCGCGGGCCCCGGGCTTGGGGGGCGCGCGCCGTGAA
GCGCCGAGGCACCGCAACCGCAAGGAGCGGCGCAGGACTCAGAGCATCAACAGCGCCTTGGCCGAACTGCGCGA
GTGCATCCCCAACGTACCGCCGACACCAAACTCTCCAAAATCAAGACCTTGGCGCTGGCCACCAGCTACATCGC
CTACCTCATGGACCTGCTGGCCAAGGACGACCAGAATGGCGAGGCGGAGGCCTTCAAGGCAGAGATCAAGAAGAC
CGACCTGAAAAGAGGAGAAGAGGAAGAGGAGCTGAACGAATCTTGAAGACACAGTGAGCAGCAACGACAAGAA
AACCAAAGGCCGAGCGGGCTGGCCGACGACGTCCTGGGCCCTGGAGCTCAAGCAGTGAGGAGGAGGAGAAGGAGG
AGGAGGAGAGCGCAGTGAGCAGGGGCCAAGGCGCCAGATGCAGACCCAGGACTCCGGAAGCCGTCGCGCTC
CGCTCTGAGGACTCCTTGCAATTGGAATCATCGGTTTATTTATGTGCAATTTCCTTCCCTCTCTTTGACCCC
TTTGAGGCATCTGCTCCCGCTCTCCCTCCAAAAAAAGTGGATATTTGAAGAAAAGCATTCATATTTTAA
ACGAAGAGGACATCCCGTGTGCGAGGCCGAATCAGACCCGGCGTGGGCGAATTCAGAAGTGCCAGGAGAGACA
AGCTAGAGGCTCTGCGGACTTCTCGGGCGGCTGACAACGCGAGGGCGAGGGAGAAAGCCATCAGGTCTTAGAC
GTGGAAGAAAGGACCTACCAAGTGTGGAGTAAAC

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FIGURE 1525

TTCAC TATTA A A A T A T T T T C C C C C C A A G T C T C A A A T A T T G A A G A A T C T C T A A C C A G A A G G C A C A G A T C A T T C A T G
G G G A T G T A T A A C C G A A A C C A G T C C T C T C C A C C G C C T G G G G A T C T T C A C T T T C G C A G I C T A C G A C T G C C T G T G A C T
C C A G A A A G A C A A A C T G C A G A T T G G C C A A G C T G C C T G A A G A C C C A G C C C G A C A G C G A T G C C T G T C A G C C C G C G T C G
C C C A C C A G G G C A G C T G C T C T C C C A A C T C G C A T G G G G G G C A C C A C C C G C C T C G G T G C C C T A G A G C T G A G C G C A G C
C G C G G C T C C A C G G G A T C G C C A G G G C C T C A G C C C T C G C G G C C G G C G C G C G G G A G T G T T G C G G G C A G G G A C C A G
A G C G C G A T C A G A G C G G C C A C C C C G A T T A G G T C G C C A G C T T T C C A G T C A C T G C G A T G C C A C T G G G G C G C C C C T
T C C A T C C T G G T T A A A T T C T C A T T G T G A T C C C C A G C C C T C T T C T C G G T T C C C C A C A C C A G G A G G C C G G T T C T C C G
C C G C T C A G G C T G G G A G A G G T C A C C G C T C C G G G C A G G T G G A C C C C A G C T C C G T C T C G G A G G A C C T T T C G C C G G A
G G C G A G C A G G A A G G G T T A A C C A T G A G C C T C C C A C C C T C A C C T C C C A G A C C C T G G T G C C G G G C T A A G G C C T C C G C
T T C C C T C C T G A G G T C T C A T T A G G A A A C C C T C A C C G C T A T T T T C A A C A T T T C C T C A A T C A A G T G C C T T T A A A T A G A
G C T G C A C A A C A G A T T G G C G G C A A A A G C T A G A T C T T G T C A C G A T T G A G A C C A A T C C A G T A T T T C A G C C T T G T T T
G C T T T G C A A T T A C G G G T T G G C T T G T G G C T A C G G T G C A C C G G G C A A A T C T G C A G C C G C T C G C T T T C T C C T G T C
G C T C C G G G C G G T G G A G A A G C A C C C G G A G T C A C T G C A G G G A G A G A G G G G A C G C G C G G G G G A G C G G
C G G A G G C G G A G A G A C T C G C T T G C A C C C A G G G C

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FIGURE 1526

GGAGGCAAAACAACCCATCTCTCTTGGAGAATCCACACTTCGTTTCTCTAGGTCCAGCCTAAATGTTACCTCCTC
CAGGGAGCCTTCCAGATACTGCTTCTCCTCTCTCCCCCAACTCCCTCCACAAAATGAAGTTTTCTCTTCTGAAT
TCCTTGCTGGTACTGTCACTTATATCTTTTGGGTAGATCTCTGGGCATGCATATGTCACTCCTGTGACTGTGG
GTTTCTTGACAACCTAATCAATGCATTGAACAAGGAGATGTTTAGACAACCCATATAAAATGAATAAGAGAAAT
AGGGTGAATACCGTCTACCCCAATTGCAATCAGATTAGTTTCCTTTATTTTGA AACGATTAGA ACTAGTAGAGG
AGTTAGATGTGGCCCACTAGGGAACAAATTTTCATCTCCAAGCCGTCCTCTGGCTCGATCGGGTCTGCACTGGGT
CTGCATCAACTTGGCTGGCTCAGAGGGAGGCTCAGCCCCAGCCTGGCCTTCTGTGTGCCACTCCCAACATCCT
GAGCAGGGCCGACTCTAGGCACCCACGATTAGCTGAGTGATCTAGGGCAAGGACCTAGGCGCTCTCTAAGTCTTA
GTTTCCCCATCTGAACAATGTTGGATAAATGACACGTACCTGGGGTGGCGAGGCTAGAGTAAATGGGAAAATCAAAG
CGCCAGCCAGAGCGGGTGCACCTGTTAGTTCTGTATTTTCTCCTCTGCTCTGCTTCTCCGTTCGGTTCTA
GCTGCTGAAGACCCAGCCGACAGCGATGCCGTGCAGCCCGCTCGCCACCAAGGGCAGCTGCTCTCCAACTC
GCATGGGGGGCACCACCCGCTCGGTGCCCTAGAGCTGAGCGCAGCCGCGGCTCCACGGGGATGCCAGGGCTC
CAGCCCTCGCGGGCGGGCGCGGGAGTGTTGCGGGGCAAGGACAGAGCGCGATCAGAGCGGCCACCCCGATT
TAGGTCGCCAGCTTTCAGTCACTGCGATGGCCACTGGGGCGCCCTTCCATCTGTGTTAAATCTCATTGTCAT
CCCCAGCCCTCTTCTCGGTTCCCAACACCCAGGAGCGGTTCTCCGCGCTCAGGCTGGGAGAGGTCACCGCTC
CGGGCAGGGTGGACCCCAAGCTCCGTCTCGGAGGACCTTTCGCGGAGGCGAGCAGGAAGGGGTTAACCATGAGC
CTCCACCCCTCACTCCAGACCTCGGTGCCGGCTAAGGCCCTCCGCTTCCCTCCTGAGGTCTCATTAGGAAAC
CTCACCGCTATTTTCAACATTTCTCAATCAAGTGCCCTTAAATAGAGCTGCACAAACAGATTGGCGGCAAAAGC
GTAGATCTTGTACGATTGAGACCAATCCAGTATTTAGCCTTGTTTGTCTTGAATACGGGTGGCTGTGGC
TACGGTGCCACCGGGGCAATCTGCAGCGCTCGCTTCTCCTCTGCGCTCCGGCGGGTGAGGAAGCGACCCG
CGAGTCACTGCAGGGAGGAGAGGGGGACGCGCGGGGGGAGCGCGGAGGGCGGAGGAGACTCGCTTGCACC
CCAGGGCGCGGGCAGCGAGAGCTGTGTTGAAGGACATCTTTTCAGGTTCTTGACAGTCACTGAGCTATACGCA
ATAATAAAGTGCGTGATTGCGGTGTGGAAACAGTGCTGTCCTTACCGGCTTCCCTTCTGTCCACCTTCCCT
CTCTCTTCACTCCGTCTCGCTTTTCTTCAGTGATGTTAGCGGTTTGTGGATTTCCTTCTCCCTCGCTGT
CAACTGCTAGCATGATTGTATACATTTTCCACAGCTGTTTATCTTGTGTTGACTTTTGTACAAAGTCACTTTAA
ATCTGCTGCAGAAAGAATAAAGCACCTAGCCCTTTGGATGGACTCTGCAGGCGTGTGGCTGTCCCTGGCCCACT
TTTAAATCTTTGGAGATGGCTCTTCTGTGTAATCAGTGCTGGGTGCGTTCGGTCACTCGTAGGCCAGCCTAG
TTTGATCAGCAGAACAGTAGTGGACTCGACTCAGGTGTAAGCCTTATATTTACAGACAATTAATCTTGGCT
CGTGTGGAACAAACTGTAATATTACTTGTCTATACCGAGAAGCACTTTAAAGT

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FIGURE 1527

MMIMTRTWGGQARVNGKIKAPARAGRTVSSCIFSSCLWFLPFRSSCLKTQPDSDACQPASPTRAAALPTRMGTT
PPRCFRAERSRGSTGIARASALAAGGAGVLRGRDQSAIRAATPDLGRQLSSHCDGHWGAPSLVKFSL

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FIGURE 1528

GAAGGAGGAGGTGGCAATCACTTATAAATGGTGCTGAAGCAGGACCCGAAGCCTAAATTCAGGAGGGTGAGCG
AGTGCTGTGGTTTCATGGGCTCTGCTTTATGATGCAAAGTGIGTAAAGGTTGCCATAAAGGACAAAAGTGAAA
TACTTTATACATTACAGTGGTIGGAATAAAAATGGGATGAGTGGGTTCCGGAGAGCAGAGTACTCAAAATATGTG
GACACCAATTTGCAGAAACAGCGAAGCTTCAAAAAGCCAAATCAGGAGCAGTATGCAGAGGGGAAGATGAGATGG
GCTGCCCCAGGAAAGAACATCTGGTCTGCAACAGAAAAATATTGAAGTGAAAAACAAAAAGAACAAACAGAAA
ACACCTGGAATGGAGATGGTGGCAGTACCAGTGAGACTCCCCAGCCTCTCGAAAGAAAAGGGCCAGGTAGAT
CCTACTGTTGAAAAATGAGGAACATTATGAACAGAGTTGAAGTTAAAGTAAAGATTCTCGAAGAGCTAAAACCA
TGGCTTGTGTGATGACTGGGACTTAATTACCAGGCAAAAACAGCTCTTCTATCTTCCGCGAGAAGAATGTGGAT
TCCATTCTTGAGGACTATGCAAAATACAAGAAATCTCATGGAACACAGATAAAGGAGTATGCAGTTAATGAA
GTTGTGGCAGGGATAAAAAGTAATCTCAACCTAATGTTGGGCACCCAGCTACTCAACAAATTTGAGAGACCACAG
TATGCCGAAATTTTCGAGATTGTCGCCATGCACCCATGTCCAGGTGTATGGAGTGCCACATCTCTGAGATTA
TCTGTACAAATTTGAGCAATGTGGCCTATACACCTCTGAATGAGAAGAGCCTTGCTTTATTACTCAATTATCTT
CAGGATTTCCCTAAAGTACCTGGCAAAAGAAATCTGCAACTTTGTTTAGTGCCAGCGATTATGAAGTGGCTCTTCT
GAGTACCATCGAAAGCTGTGTCAGGCACTCTCACTCACTTATGCTGGATCTCCATAAACACATTTTTTGTTT
TTAGTCTATCTCTGTACAAACGATGTGCTTTGAAGATGTTAGTGTATAACAATTGATGTTTGTGTTTCTGTTTGA
TTTTAAACAGAGAAAAATAAAGGGGTAATAGCTCCTTTTCTCTTTTTTTTTTTTTTTTTCATTTCAAAGTTGCTG
CCAGTGTTTTCAATGATGGACAACACAGGGATA TGCTGTAGAGTGTTTTATTGCCTAGTTGACAAAGCTGCTTTT
GAATGCTGGTGGTCTATTCCCTTAAACACTATGCATTTTATAATACGTGTTATGCTACATGACAAAATGCTCT
GATTCTAGTGCCAAAGGTTCAATTCAGTGTATATAACTGAATACACTCATCCATTTTGCTCTCTTTTTTTTTT
AATGGTGCTTAAAGTAAAGAGCCATCCTTTGCAAGTCATCCATGTTGCTACTTAGGCATTTTATCTTGGCTCAA
ATTGTTGAAGAATGGCTTGTTCACAGTTTTTGTATTTTGTCATAATGCACGTTTTAACATGATAGATGCAATGC
ATTGTGTAGCTACTTTTCTGGAAGAGTCAATCTTTTAGGAATGTTTTTCAGATCTTCATTAATTTTTTCTCTTA
AATTC

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FIGURE 1529

MRWAAPGKKTSGLQQKNIEVKTKKNKQKTPGNGDGGSTSETPQPPRKKRAQVDPTVENEETFMNRVEVKVKIPEE
LKPWLVDWDLITRQKQLFYLPAAKNVDSILEDYANYKKSHGNTDNKEYAVNEVVAGIKEYFNLMLGIQLLNKFE
RPQYAEILADCPDAPMSQVYGVPHLRLSVQIGAMLAYTPLNEKSLALLNLNLDHFLKYLAKNSATLFSASDYEV
ALPEYHRKAV

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FIGURE 1530A

CTGGGCGGGCGGGGCGGGGAGAGGGCGGGGAGCGGCTCGTGCGGCAGGTACCATGCGGACGCGCGAGCCCGGC
GAGGGCCCCGCGAGGCCCGGTCCTGCTCGGGGGCGCGCTGAGACGCGGGGTGAGCTCCACGAGAGCGCCCTGCG
CACTTCCGGGCCAATCTTGCATTCCCGACAGTTAAGCAATGGGGAGACATTTGGGCTTGGCTCTGCTTCTGCTCC
TTCTCTTCCAAACATTTTGGAGACAGTGTAGGCGAGCCACGACTTGAACAGACTCTCTGCAAGTTTACACACCTCG
AGTACAACGTCACCGTGCAGGAGAACTCTGCAGCTAAGACTTATGTGGGGCATCTCTGCAAGATGGGTGTTTACA
TTACACATCCAGCGTGGGAAGTAAGGTACAAAAATTTGTCGGAGACAGTGAACACCTGTTCAAAGCTGAAGAGT
ACATTCTCGGAGACTTTTGCTTTCTAAGAATAAAGGACCAAGGAGGAAAAACAGCTATTCTTAATAGAGAAGTGA
AGGATCACTACACATTGATAGTGAAAGCACTTGAAAAAATACTAATGTGGAGGCGGGAACAAAGGTCAGGGTGC
AGGTGCTGGATACAATGACTTGAGACCGTTATTCTCACCACCTCATACAGCGTTTCTTACTCGAAACACAG
CTATAAGGACCAGTATCGCAAGAGTCAGGCGCCAGGATCGACACATAGGAACCAACGGGGAATTTTACTACAGTT
TTAAAGATCGAACAGATATGTTTGCTATTACCCCAACGAGTGGTGTGATAGTGTTAACGTGGTAGACTTGATTACC
TAGAGACCAAGCTCTATGAGATGGAATCCTCGCTCGGACCGTGGCATGAAGTTGTATGGGAGCAGTGGCATCA
GCAGCATGGCCAAGCTAACGGTGCACATCGAACAGGCCAATGAATGTGCTCCGGTGATAACAGCAGTGACATTGT
CACCATCAGAAGCTGGACAGGACCCAGCATATGCAATTGTGACAGTGGATGACTGCGATCAGGGTGCCATGGTG
ACATAGCATCTTTAAGCATCTGTGGCAGGTGACCTTCTCAGCAGTTTAGAAGACAGTGAGGTCTTTCCAGGGAGTA
AGGAGTATAAAGTCAAAGCCATCGGTGGCATTGATTGGGACGTATCCTTTCCGCTACAAATCTCACACTACAGG
CTAAGATTAAGGAAGCTCCGCCCGAGTCTCTTCTGTTAAAGTCACTACAGTGACCTTCCACAGCTCAAAGCCG
GGCCAGTCAAGTTTGAAGAAGTATTTACAGAGCAGAAATAAGTGAATTTGCTCTCCCAACACCTTGTTGTTGA
TGGTAAAGGCCATTCTCGCTTATTCCCATTTGAGGTATGTTTTAAAGTACACCTGGAAAAGCTAAATTCAGTT
TAAATTAACACCTGGTCTCAATTTCTATTAGAACGATTAAGAGACAGCAGGACGCCATTTTGAACCTGAAG
TAACACAACTGTGACAGAAAGCGTCCACCAAGGCTTCTGGTGAAGTCTTAGGTGCAATAGCAATCCCCCTGAAT
TTACCAGACAGCGTACAAAGCTGCTTTTGATGAGAAGCTGCCCATTTGGTACTACTGTCAAGAGCTGAGTGCCG
TAGACCTTGATGAGGTTGAGAAGCGGTACGTGACATACAGTATCGCAATTTAAATCATGTGCGGTTTGGATTTG
ACCATTTCACTGGTCCGCTGAGTACGTGCAGAAAACCTGGACTACGAACCTGATGCGTCCGGGTTTATACTCTGAGGA
TTCTGTCATCAGACTGAGGCGCTTGCGCTACCGCGGGGAAGTCGAAGTCCTTGCTACAAATTACTCTCAATAACTTGA
ATGACAACACACCTTTGTTTGAGAAAAATAAATTTGTGAAGGACAAATCCCAAGAGATCTAGCGCTGGGAGCAAA
TAACCACGTGTTTCTGCTATTGATCGAGATGAACCTTCAAGTTGGTACAGTATCAGATTGAAGCTGGAAATGAAGTGG
ATTTCTTTAGTTTAAACCCCAACTCGGGGGTATTGTCTATTAAAGCGATCGCTAAATGGATGGCTTAGGTGCAAGGG
TGCTCTTTCCACAGTCTGAGAAATCAGAGTACAGATGGAGAAAAATTTGGCCACCAATTATATATCAACATAACAG
TGGCTGGCCAGTCAAGCTGGTAACTTGCACTGTGAAGAGACTGGTGTGCGCCAAATGCTGGCAGAGAAGCTCC
TGCAGGCAAAATAAATACACACAGGAGAGGTGGAGGATATTTTCTCGATTCTCACTCTGCTCACTGCTACAC
TACCGCAGTTTAGAAGCACTCTCCGACTGGTATTACAGTAAAGGAAACACGCTGTGGGTTCAGTGTAAATTT
TCATGAACCTCCACTGACCTTGACACTGGCTTCAATGGAAAACTGGTCTATGCTGTTTTCTGGAGGAAATGAGGATA
GTGGCTCTATGATTGATATGGAACAGGAATGCTGAAAAATTTTATCTCCTTGACCGTGAACACAGCAAAAT
ACACCTGGAATATTACCGTCTATGACCTTGGGATACCCAGAAAGGCTGGTGGGCTCTCTACATGTCGTGGTGT
TCGATGCCAATGATAATCACCAGGCTTTTACAGGAGACTTATTGTGGAAGTGAAGTGAAGACAGAAAGGATAC
ATAGTGAATCATCCAGGTTGCGGACAGACATGAAGACCTGGGGCCCAACCGACACGTCGACGTACTCAATTGTTA
CAGACACAGACACATTTTCAATTGACAGCGTGAAGGGTGTGTTAAACATCGCACGCGCTTGATCGAGAGCTGC
AGCATGAGCACTCCTTTAAGGTTGAGGCCAGGACCAAGCCAGAGAGGCTGAGCTGTTTCCACTGTCTGTTG
TGAAAGTATCACTAGAAATGTTAATGACACCCACCTACATTTATCCACCTAATATCGTGTGAAGTCCGAG
AGGATCTTCCAGAGGAACCGGATCATGTGGTTAGAAGCCACGATCCTGATTTAGTCACTGCTGGTCAAGTGA
GATACAGCTTCTGGACAGCGGAGGAAGAAATTTGATGTGGATAAATCAGTGGAGCACTGGAGAGCACTAGGATCGTCCAG
AGTTGGACTTTGAGAAGAAGCAAGTGTATAATCTCACTGTGAGGGCCAAAGACAGGGAAGCGAGTTTCTCTGT
CTTCACTTGCTATGTTGAAGTTGAGGTGGTTGATGTGAATGAGAACCTGCACCAACCGGTGTTTTCCAGGCTTGT
TGGAAAAGGGGACAGTGAAGAGAGTGCACCTGTTGGTTCATTGGTAAAGACGGTGTGCGCTCATGATGAGGAC
CCAGAAGAGATGGGAGATCCGATATCCATTAGAGATGGCTCTGCGGCTGGGTTTTCAAATATAGGTGAAGAGA
CAGGTGTCATAGAGCTCAGATGCACTGGACCGTGAATCGACCTCCATTATTGGCTAACAGTCTTTCGACACCG
ATCAGGGGTGTCGTGCCCTTTTATCATGTTTCATAGAGATCTACATAGAGGTTGAGGATGTCATGACAAATGCACAC

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FIGURE 1530B

AGACATCAGAGCCTGTTTATTACCCAGAAATCATGGAATAATTCCTTAAAGATGTATCTGTGGTCCAGATCGAGG
CAATTGATCCGATTCGAGCTCTAATGACAAGCTCATGTACAAAATTACAAGTGGAATCCACAGGAATCTTTTT
CAATACATCTCTAAAACAGGTTCTATCCACAACCTACGTCAAGGAAGTCAGCCCGAGAAACAGCAAGATGAACACATAT
TAGAGGTTACTGTGACAGACAATGTGTAGTCCCCCCAATCAACCATTTGCAAGAGTCATTGTGAAAATCCTTGATG
AAAATGACAACAACTCAGTTTCTGCAAAAAGTTCTACAAAATCAGACTCCCTGAGCGGGAAGGACCGAGACCGAG
AAAAAATGCCAGACGGGAGCGGCTTATCACGTCTATAGCCACCGACCAAGGATGAGGGCCCCAATGCAGAAATCT
CCTACAGCATCGAAGACGGGAATGAGCATGGCAAATTTTTCATCGAACCGAAAACCTGGATGGTTTCGTCCAAGA
GGTTTTACGACGCTGGGAATATGATATCTTTCAATTAAGGCAAGTGACAAATGGTCGCCCTCAAAGTCATCAA
CCACCAGACTCCATATTGAATGGATCTCCAAGCCCAAACCGTCCCTGGAGGCCATTTTCATTTGAAGAATCATTTT
TTACCTTTTACTGTGATGGAAGTGACCCCGTTGCTCAGATGATTGGAGTAATATCTGTGGAGCCCTCTGGCATAC
CCCTTGGTTTGACATCATCTGGTGGCAACTACGACAGTCACCTCGATGTGGACAAGGGAACCTGGAACCATCATTTG
TTGCCAAACCTCTTTGATGCAGAACAGAAGTCAAACTACAACCTCAGACTCGAGGCTACAGATGGAAACCCACCTA
TCCTCACTCAGGTATTCATCAAAGTAATAGACACAAATGACCAATCGTCCCTCAGTTTTTCATACATAAAGTATGAAG
TTGTTATTCTGTAAGATACAGCGCCAGAAAACAGAAATTTTGCAATCAGTGCTGTGGATCAGGATGAGAAAAACA
AACAATCTACACTCTCGAGACGAGTAGAGATCCACTGAGTCTCAAGAAATTCGCTTTGATCCTGCAACCGGCT
CTCTCATATCTTCTGAGAACTGGATCATGAAGCTGTTTACCAGCACACCTCCAGGTCATGGTACGAGATCAAG
ATGTGGCTGTAAACGCACTTTGTCAAGGATTTGTGGTCAATGTCCAGCAGACGAATGACCAACGCCCGGTGGTCA
CCGCTCTCTCTACAAAGGCGGGGTTTATGAATCGGACGCGTTGGCTCAGTTTGTGTCAGGTGACGGCTCTGG
ACAAGGACAAAGGAAAAATGCTGAAGTGTGTACTCGATCGAGTCAGXXXXXXXGAAATATTGGAAATCTCT
TTATGATGTATCCTGTCTTGGGCTCTATTAACACTGCCAAGAAATTAGATCGAAGTAACCAAGCGGAGTATGATT
TAATGGTAAAGCTACAGATAAGGCGAGTCCACCAATGAGTGAATAACTCTGTGCGTATCTTTGTGCAACAATG
CTGACAAACGCTCTCCGAAGTTTACATCAAAGAATATTTCTGTTGAACCTTAGTGAAACTGTGCAGATTGGGAGTT
TCGTTGGGATGGTTACAGCCCATAGTCAATCATCAGTGGTGATGAAATAAAGATGGAAATACAGGTGATGCTT
TTGATATTAATCCCAATTTCTGGAACATATCATCACTCAGAAAGCCCTGGACTTTGAAACTTTGCCCAATTACACAT
TGATAATACAAGGAATTAACATGGCTGGTTTGCCCAATAACAACGGTTCTAGTTCACTTGCAGGATGAGAATG
ACAACGCGCCAGTTTTTATGCGAGGAGAATATACAGGACTCATTAGTGAATCAGCCCTCAATTAACAGCGTGGTCC
TAACAGACAGGAATGTCCCACTGGTGATTCGAGCAGCTGATGCTGATAAAGACTCAAATGCTTTGCTTTGATATC
ACATTGTTGAACCATCTGTACACACATATTTTGCTATTGATTTCTAGCACTGGTGCTATTATCAACAGTATCAAGT
TGACATGTAAGAAACAAGTATTTTTCATTTTACCGTCCAAGTGATGACATGAGGAAACCCACGTTTATTGTGCTG
AGTATGCAGCGAATGTAAACAGTACATGTAATTGACATTAATGACTGCCCCCTGTGTTTGGCAAGGCTATTATATG
AAGCATCTCTTTTGTGTACCAATCAAAAGGAGTAAAAGCTATCAGTAAGATGCTACAGATGACATTCAAGTG
CATTCTCACAGTTGATTACTCCATCACCAGAAGGCAACATCGGGGAGAAGTTTTCTATGGACTACAAGACTGGTG
CTCTCACTGTGCTCAAAACCAACTCAGTTAAGAAGCCGCTACGAGCTAACCGTTAGAGCTTCGATGGCAGATTTTG
CGGGCTTACCTCTGTGCAAAATTAATGTGAAGAAAGCAAGAAAGTCACTTAAGCTTACCAGGATGTCTTACT
CTGGCGTAGTGAAGAGAATTCCACCGAGGCGGAAACATTAGCTGTCAATTACTGCTTATGGGAATCCCAATCAATG
AGCCCTTGTGTTTATCACATCTCTCAACCCAGATCGAGATTTAAAATAAGCCGCACTTCAGGAGTTCTGTCAACCA
CTGGCACGCCCTTCGATCGTGAGCAGCAGGAGGCGCTTTGATGTGGTTGTAGAAGTGACAGAGGAACATAAGCCTT
CTCAGTGGCCACGTTGTCTGGAAGGTCAATTGTAGAAGACCAAAATGATAATGCGCCGCTGTTTGTCAACCTTC
CTGATACGCGCTGTGTTACAGCATACAGAGCTGAGGTGGGCCATTCGATTCGATGCTGCTGTGACAGAGACA
GTGGCAGAAACGGGGAAGTGATTACTTACCTCAAGGAACATCATGAACACTTTCAAATTTGACCCCTTGGGTGAAA
TTTTCATGAAAAGCAATTTGAGCTTGACACCTTAAATAAAGAAATATCTTGTGTACAGTGGTTGCAAAAGATGGAG
GGAACCCGCGCTTTTTCAGCGGAAGTATCTGTTCCGATCATGTCATGAATAAAGCCGTGCTGTGTTTGAAGAAC
CTTTCTACAGTGCAGAGATTGACAGAGCATCCAGGTGACACAGCCCTGTGGTCCACGTCGAGGCTAACAGCCGGG
AAGGCTCGAAGTGTTCTACAGCATACAGACGAGAGCCCTTTCAGCCGTTCACTATTAACTTCAATACTGGAG
TTATCAATGTATAGCTCCTCTGGACTTTGAGGCCACCCGGCATATAAGCTGAGCATACGCGCACTGACTCCT
TGACGGGCGCTCATGCTGAAGTATTTTGGACATCATAGTAGACGACATCAATGTAAAGCTTCTGTGTTGCTC
AGCATCTTATGCGGTTGACCTGTCTGGAGCATCTGTAATTGGAACGTTGTGTTGTTCAACCCGACCCAGGAT
CTGATTCAGAACCAATAGAGGAATCTCATACAGATGTTTGGGAATCAGACAGAGTCAATGATCATTTTCATG

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FIGURE 1530C

TAGACAGCAGCACTGGCCCTCATCTCACTACTCAGAACCCTGGATTACGAGCAGTCCCGGCAGCACAGCATTTTTG
TGAGGGCAGTTGATGGTGGTATGCCCCACGCTGAGCAGTGATGTGATTGTCCAGCTGGACGTTACCGACCTCAATG
ATAATCCACCACCTCTTTGAACACACAGATTTATGAAGCCAGAATTAGCGAGCAGCCGCCCTCATGGGCATTTGCGTGA
CCTGTGTAAAGGCCCTATGATGCAGACAGTTGACAGCATAGACAAGTTGCAGTATTCCATTCTGTCTGGCAATGATC
ATAACAGTTTTCGTCATTGACAGTGCACAGGGATTATCACCTCTCAAAACCTGCACCGGCACGCCCTGAAGCCAT
TTTACAGTTCTAACCTGTGAGTGTCTGATGGAGTTTATAGAAGTTCACCCAGGTTTCATGTAACTGTAATTGGAG
GCAATTTGCACAGTCCGTCTTCCCTCAGAACGAATATGAAGTGGAACTAGCTGAAAACGCTCCCTACATACCC
TGGTATGGAGGTGAAAACTACGGATGGGGATTCTGGTATTTATGGTCACGTTACTTACCATATTGTAATGACT
TTGCCAAAGACAGATTTTACATAAATGAGAGAGGACAGATATTTACTTTTGAAAAAATCTGATCGAGAAACCCCGG
CGGAGAAAGTGATCTCAGTCCGTTTAAATGGCTAAGGATGCTGGAGGAAAAAGTTGCTTCTGCACCGTGAATGTCA
TCCTTACAGATGACAATGACAATGCACCACAATTTGAGCAACCAAATACGAAGTGAATATCGGGTCCAGTGCTG
CTAAAGGGACTTCAGTCGTTAAAGTTCTTGCAAGTGATGCCGATGAGGGCTCCAATGCCGACATCACTTATGCCA
TTGAAGCAGACTCTGAAAGTGAAAAAGAGAATTTGGAATTTAACAACCTGTCGGGCTAATCACTACAAAGGAGA
GCCCTATTGGCTTGGAAAAATGAATCTTCACITTTCTTGTGTAGAGCTGTGGATAATGGGTCTCCATCAAAAGAAAT
CTGTTGTCTTGTCTATGTATAAATCCTCCACCGGAAATGCACTTCCAAAATTTACAGAACCTTTTATACCT
TTACAGTGTGAGAGGACGTGCCCTATTGGAACAGAGATAGATCTCATCCGAGCAATCATAGTGGGACTGTCTTT
ACAGCTCGGTCAAAGGAATATCTCCGAAAGCAATAGGGATGAGTCTTTGTGATTGACAGACAGAGCGGAGAG
TGAAGTTGGAGAAAGCTTTGATCATGAGACAACATAAGTGGTATCAGTTTCCATCTGGCCAGGTGCCCTCAAG
ATGACCATGAGATGGTGGCTTCTGTAGATGTTAGTATCCAAAGTGAAGAGTCAAAATGACAACAGCCGGTCTTTG
AATCTAGTCCATATGAGGCATTCATTGTTGAAAACCTGCCAGGGGGAAGTAGAGTAATTCAGATCAGGGCATCTG
ATGCTGACTCAGGAACCGGCCAAGTATGATATAGCCTGGATCAGTACAAAGTGTGGAAGTCATTGAAATCTCT
TTGCCATTAACTGGAAAACAGGCTGGATTACAACTTTAAAGGAACCTTGACCATGAAAAGAGAGACATTTACCAGA
TTAAAGTGGTTGCATCAGATCATGGTGAAGAGATCCAGCTATCTCTCCACAGCCATTGTGGATGTTACCGTCACCG
ATGTCAACGATAGTCCACCACGATTACGGCCGAGATCTATAAAGGGAATGTGAGTGAGGATGACCCCTGAGTG
GGGTGATTGCCATCTTAAGTACCACGGATGCTGATTCTGAAGAGATCAACAGACAAGTTACATATTTCAACAG
GAGGGGATCTTTAGGACAGTTTGCTGTTGAAACTATACAGAAATGAATGGAAGGTATATGTGAAGAAACCTCTAG
ACAGGGA AAAAGGGACAATTAACCTTCTTACTATCACGGCACTGATGGCACCTTCTCATCAAAAGCGATAGTTG
AAGTGAAAGTCTGGATGCAATGACAAACAGTCCAGTTTGTGAAAAGACTTTATATTCAGACACTATTCCTGAGT
ACGTCCCTCTGGAAAAATTGATCTGCAGATCTCTGCTACAGACGACAGATCCGCTCTAACGCTGAAATTAATT
ACACGTTATTTGGGTCTCAGGTGCGA AAAAATCAAACATAAATCCAGACACAGGTGAAGTGA AAAACGTCAACCCCC
TTGATCGTAGAGGACAGCTGTGTTATCTATCTTCTCGTCAGGGCCACAGATGAGGAGGAAGATTCTGCCAACACA
GTATTTGTGCTCACGCTAGAAGATGTGAACGATAACGCCCCGAATTTCTCTGCCGATCTTATGCCATCACCGTGT
TTGAAAACACAGACCGCGGAACGCTGCTGACAAGAGTGACGGCCACAGATGCCGACGCGAGGATTTAACTCGGAAGA
TTTATATCTCAGTGTAGCTGCTGTAGTGGGACTTCTCCATTAAACGAATTTCTGGAATTTATTCAGTTAGAAA
AACCTTTGGACAGAGAACTCTCAGGACGATATACCCCTCTCTTTGAAAGCTGTGGATCAAGGCTTGCCAAAGGAGG
TGACTTGGCACTGGCACTGTGATTGTATCAGTTCTTGACATAAATGACAACCCCCCTGTGTTTGAAGTACCGTGAAT
ATGGTGCCACCGTGCTGAGGACATTTCTGTTGGAACAGAAGTCTTCAAGTGATGACGACAGATCGGGATATTG
AAGCAAATGCAGAAATACCTATCTAATAATAAGTGAAATGAACATGGGAAATTCAGCATAGATTTAAAAACAG
GGGCGGATTTATCATTTGAGAGTCTGGATTATGAGAGCTCTCATGAGTATTACCTACAGTATGAGGCACTGATG
GAGGCACGCCCTTCACTGAGGACAGTGTGCCACTGTGAACGTTAATGTAAACAGATATCAACGATAATACCCCTGTGCT
TCAGCCAAAGACACCTACAGCAGCTCATCAGTGAAGATGCCGTTCTTGAGCAGCTCTGTCATCAGCGTTATGGCG
ATGATGCCGATGGACCTTCAACAGCCACATCTCAACTCAATATAGATGGCAACAGGAAGCTGCTGCACAA
TTGACCCCGTCAGGGGAGAAGTCAAAGTGACCAAACCTCTCAGCCGAGAAACGATTTCAGGTTACACGCTCACGG
TCAAGCTCTGATAATGGAGCTCAACCCAGAGTCAACACGACGACGTTGAACATTCGATGTGTCGATGTCAATG
ACACCGCGCCGCTCTTCTCAGGGGAAACTACAGTGCTATTATCCAGGAAAAATAGCCAGTGGGCTTCAGCGTGC
TGCAGCTGGTAGTAAAGATGAGGATTTCTCCATAACGGTCCACCCTTCTCTTTTACTATTGTAAAGTGAAATG
ATGAGAAGGCTTTTGAAGTTAAACCGCAAGGAGTCTCTGCTGACATCTGCCATCAAGTAGGAGGAAGATCATC
ATTACTTACTGCAGGTGAAGGTGGCAGATAATGAAAAGCCTCAGTTGTGCATCTTTGACATACATTGACATTAGGG

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FIGURE 1530D

TAATTGAGGAGAGCATCTATCCGCCCTGCGATTTCGCCCTGGAGATTTTCATCACTCTCTCGGAGAAGAATACT
 CAGGTGGCGGTCAATTGGGAAGATTCATGCCACAGACAGGACGCTGTATGATACCTCTAACTACAGTCTCGACCCCTC
 AGATGGACAACCTGTTCTCTGTTCCAGCACAGGGGGCAAGCTGATGACACAAAAAGCTAGACATAGGGCAAT
 ACCTTCTCAATGTCAGCGTAACAGATGGGAAGTTCACGACGGTGGCCGACATCACAGTGCATACAGACAAGTCA
 CACAGGAGATGTTGAACCAACACCATCGCGATCCGCTTGGCCAACCTCACTCCGGAAGAATTTCGTTGGTGACTACT
 GGCGCCACTCTCAGCGAGCTTTACGGAACATCCTGGGTGTGAGGAGGAACGACATACAGATTGTTAGTTTGCAGT
 CCTCTGAACCTCACCCACATCTGGACGCTTACTTTTTGTAGAGAAAACAGGTAGTGCTCAGATCTCAACAAAAC
 AACTTCTGCACAAGATTAACTCTTCCTGACTGACATTGAGGAATCATTTGGAGTTAGGATACTGAATGTATTCC
 AGAAACTCTGCGCGGGAGCTGGAATCGCCCTGGAAGTTCTCGCATGAAAGGTGTCTGTGGATGAAAGTGTGATGT
 CAACACACAGCACAGCCAGACTGAGTTTTGTGACTCCCGCCACACAGGGCAGCGGTGTGCTCTGCAAAAGAGG
 GAAGGTGCCACCTGTCCACCATGGCTGTGAAGATGATCCGTGCCCTGAGGGATCCGAATGTGTGTCTGATCCCT
 GGGAGGAGAAACACACTGTGTCTGTCCAGCGGCAGGTTTGGTCAGTGCCACAGGGAGTTATCATATGACACTGA
 CTGGAAACAGCTACGTGAAATACCGTCTGACGGAAATGAAAACAAATTAGAGATGAAAACAGCACTGAGGCTCA
 GAACATATTCCACGCATCGCGTTGTCTATGTATGCTCGAGGAAGTGAATATAGCATCTTGGAGATTATCATGGAA
 GGCTGCAGTACAAGTTTGAATCTGGAAGTGGCCCTGGAATTGTCTCTGTCAGAGCAATTACAGTCAATGATGGCG
 ATGTGGCAGCTAGTGGCCCTGGAAGTGAATGAAACTATGCTCGCTTGGTCTAGACCAAGTTCTACATGCTCATCGG
 GCACAGCCCCAGGGACTCTGAAAACCCCTGAACCTGGATAACTATGTGTTTTTGGTGGCCCACTCCGTCAGCAGG
 GAACAAGGATCGGAAGAAGTCTCAAGTTGGTAATGGTTTTCAAGGGTGTGATGGACTCCATTATTTGAATGGGC
 AGGAGCTCCCTTTAAACACGAAACCCAGAAGCTATGCACATCGAAGAGTCGGTGGATGTATCTCCAGGCTGCT
 TCTTGACGGCCACGGAAGACTCGCCAGCAACCCCTTGCCAGAAATGGAGGCGTTTGAATCCGTCACCTGCTGGAG
 GTTATTACTGTCAAACTGACGTGCTGTACATAGGGACCCACTGTGAGATAGCGTCAATCCGCTTCACTCCAGC
 CATGCCCTCTATGGGGGCACGTGTGTTGTCGACACCGAGGCTTGTGTTGCCAGTGTAGAGGATTATATACTGATC
 AGAGGTGTCACTTAGTTCATCTGCAAAAGATGAACCTGTAAAGATGGCGGAACATGCTTTGACAGTTGGATG
 GCGCGCTTGTCAAGTGTGATTCGGGTTTTAGGGGAGAAAGGTGTCAAGTGTATAGCAAGTGTCTCGGAAACC
 CTTGCCCTGACAGGGGGCCCTCTGTGAGAACACGCAAGCTCCTATCACTGCAACTCGAGCCACGATACAGGGGAC
 GTCACCTGCGAGGATGTCTGCCCAACAGTATGTGTCCACGCGTGGAAACATTGGGTTGGCGGAAGGAATTGGAA
 TCGTTGTGTTTTGTCAGGGATATTTTACTGGTGGTGGTGTGTGTTCTCTGCCGTAAGATGATTAGTCGGAATA
 AGAAGCATCAGGCTGAACCTAAAGACAAGCACTGGGACCCGCTACGGCTTTCTTGCAAAAGCCGATTTTGTATT
 CCAGCTAAATAAGAACTTTTACTCAGACATACACCCAGGTGCTGTCCGCGCTATTTCCTACACCCCGAGTA
 TTCCAAGTGACTCAAGAAACAATTCTGGACCGAAATCCTTCGAAGGATCTGCTATCCGAGAGCATCCGGAATTC
 GCACCTTTAAACCCGAGTCTGTGACAGCGGCACGAAAAGCAGTGGCGGTCTGCAAGCTGGCGCAACCTGCTC
 CCCCACCCCTTCAAACCTCCCTCTGACAGCGACTCCATCCAGAAGCCTAGCTGGGACTTTGACTATGACACAA
 AAGTGGTGGATCTTGATCCCTGTCTTTCCAAGAAGCCTCTAGAGGAAAAGCCTTCCAGGCCATACAGTGCCCGGG
 AAGCGCTGTGGAAGTGCATCTCTGAGCTCCTCCAGTCCGAATCTGCGCAATCCAAAGGCCACTGTGTGAAGA
 CATCAGATTGGATGCCAAGCGTTCCTCTGCGGCACATACAGAAGTTCGCCAATATGAGGTGATTGATGAGAGA
 CACCCCTGTACTCAGCAGATCCAAAACGCCATCGATACGGACTATTACCTGGAGGCTACGACATCGAAAGTGATT
 TTCTCCACCCCGAAGAGCTTCCCGCAGCTGATGAGCTACCACCGTTACCGCCGAATTACGCAATCAGTTTG
 AATCCATCCACCTCTCTAGAGACATGCTGCCGCGGTAGCTTGGGTTCTTCAACAGAAACCGGCAGAGTTTCA
 ACTTGAATCAGTATTTGGCCAAATTTTATCCCTCGATATGCTGAACTCAACAAAAGGCCACTGTGTGAAGA
 GTACTGTAGAGAAACCCATGCCCTTACCCGCCAGGGATCAAGAACAATTGAGGCGCCGCTGTGCGAGAGCA
 TGCCCATGCTGTGTGACGCTCCACCGCCTCTGCTGCTGACGTGTGACGCTGCTGCGAAGTGGAGTCCGAGTCA
 TGAATGAGTACTAGAGCGCGGGACGACGCCCACTCGAAGAGGTGACGATCCCGCCCTGGATTCCAGCAGC
 ACACGCGCTGTGACTCTCAACTCCCCCAAAGTGCCGTGACTTTAGTGAACCTAGAGGTGATGTGAGTAATCCGC
 CGTGTTCTTGGCAGCTGGTCTTCAAGCTTTTTTGGTGGCGCAATGGCGATGGCTGGATCCTGCGCCT
 CTGGACGTGCTAGCCATTTCCAGTGTCCCAACTACTGTCATCGTGAGGTTTTCAATCGGCTGTGCGATTTCCCAAC
 GTCTTTTGGGATTTACATCTGTCTGTGTTAAAAATATCAACGAAAAATCAGTCCGTGTGTGTCAGCATGATTC
 TGATTTATATAGATTGTGATTTTAAATTTCCGTCTTTTTTTTGTAAATTTTATGACAGATTGATTTT
 TCATAGTTTTAACTAGATTCCAAGATATTTGTGCAATTGTTTCAACTGAATTTTGGTGGTGTGTCAGTGCCATTA

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FIGURE 1530E

TCTAGCACCTGATTTTTTTTTTACTATAACCAGGGTTTCATTCTGCTTTTTCCACTGAAGTGTGACATTT
TGTTAGTACATTTCACTGTAGTCATTCATTTCTAGCTGTACATAGGATGAAGGAGAGATCAGATACATGAACATG
TCTTACATGGGTTGCTGTAATTTAGAATTATAAACATTTTTTCATTATTGGAAGTGTAAACGGGGACCTTCTGCATA
CCTGTTTAGAACCAAAACCACCATGACACAGTTTTTATAGTGTCTGTATATTTGTGATGCAATGGTCTTGTAAAG
GTTTTTAATGAAAACATACCATTAGCCAGTCTTCTTACTGACAATAAATTATTAATAAAAT

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FIGURE 1531

GGGGCGCTGCCCCGGTGGCTCTGGCCCCGCCGGGCCGTTGGCCCCAGCCCGCGGCCCTTGAGCTCCGGTAGCCCCG
CGCTGGAGAAGCTGTTGCCCGGGGCGGCCCTTGCGGACCTTCTCGAGCGCCAGGCGGGGTCTGAAGCCCCATT
TGAAGGTCAGGAGGCCGAGTTGCTGGCGGTGATCAAACTGCTGAACGAGAAGGAGCAGGAGCTCGGGGAGACTG
AGCACTTGCTGCACGATGAGAATGAAGGTTTAAGGAACTTGACAGAGAAATGAATCACTTTGTGTCAAAAAGAAA
TAATCAGCTGAAGCATCAGATTACTTACTTTTGGTTCCCTCAGAAGAAACAGATGAAATGATTGATCCTGG
AAGTAATGCAGGAGTTGGAGGTCAGGAGGCAATGTTGTTTACATCAGAGATATTTGATATGTATCAGCAATATG
CTGCATTTAAAGATGGCATTTTGAAACCCCTGGAAATATTTCCAAGTGAAGTAGGTGGCCTTAGACATGCATCTG
CCAGCATTGGGGGTTCAGAAGCCTATAGGCACATGAAATTTGAAGGAGGTGTTACAGAGTACAAAGAGTGCCAA
AGACAGAAAAGCAAGGCTGCGTCCATACTAGCACCATGACTGTAGCAATATTATCCCGAGCCTACTGAGATTATC
TGGTGATTAATCCGAAAGATTGAGAATTGACACTAAGCGAGCCAGTGGAGCTGGGGAGCAGCATGTAAATACCA
CGGACAGTGCTGTCCGGATAGTTCACTTCCAACAGGTGTTGTTTCTGAATGTCAACAAGAGAGATCTCAGCTGA
AAAATAAAGAGCTGGCTATGACAAAGTTACGTGCAAACTGTACAGCATGCATGTAGAAGAAGAAATAAATAAAA
GACAGAAATGCTAGAAAATTTCAGATTGGAAGTAAAGGAAGATCAGAGAAAATAAGAACATATAATTTCCACAGA
ACCGGGTCACAGATCACAGAATAAACAGACGCTGCATGATCTTGAACCTTTTATGCAAGGAGATTATCTACTGG
ATGAACCTGTACAGTCATTGAAGGAATACGCCAATTATGAATCTTTAGTAGAAATTTATTTCCAAAAAGTTAA

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FIGURE 1532

ATGCCGCTGCGGGTTTTTGGGCTTTCTGCCCCCGCCGCCGCGGCTTCTGACCTGGCTCGCCGAATTTAGCC
CCTGCCGTACGGCTTTTTGGGGCTCTTTGCCCTCGCCGCCGCGGCTTTTTGCCGCCGCGAGCTTTTTGCATCTTT
CTCCCCCTGCCTCCGTGGCTTTTTGCCCTGAAGCCACAGCTTTTTGCCCTCGCCGCCGCGGCTTTTTGCGACCT
TTTCCCCCTGCTGCCGCGAGCTTTTGTCCCAACACGCGGAATTTCTGCCGCGGCTTTTGTACCGCCGCC
GTGGCTTTTTATGGCTTTTGGCCCCCGGTTTTTCCCGCCGCGGCTTCTGCCCGCAGCCCGGCTTTTTGCGGC
TTTTTGGCCCGTGGCTTTTGGCCCCCGCACTGTGGCTTTTACGCTTTTCCGCCCGCCGCCGAGGTTTTT
CCAGCCGCGGCTTCTTGTCCCACTGCCCGGCTTTTTGTGTCGTTTTGCCCGCCGCCGCGGCTTTTTGTCTG
TATTTGTCCCTGCCACCACAGCTTTTTGCCCGCCGCCGCGGCTCCTTGCCCTACGTGGCTTCTGTCCCG
CCTCCGCGCTTTTATCACCCAGCCGCTTTTGTCCCGCCGCCACGGGTTTTTGTCTCTGCCGCCGAGGGTT
TTTGGCGCTTCATGTCCCAACCGTGTGGCTTTTTGCCCGCCCTGCTTTTGGCCCTCTGACGCGGCTTTTTGC
GGCTTTTTACCACTCCACCGTGGCTTTTTGCGGCTTTTGGCACCGGACGCCATGGCTTTTACGGCTTTTTGCC
CGCCGCCACGGCTTTTGTCTGCCGCCACCGTTTTAGCCCCACCGCGCTTTTGCACCGCAGCCGATCTT
TTTGGCGCCGCACTTCTTACCCCGCCACCGGTTTTTACCGCTGAGGCTTTTACCCCGCCGTCGCGGTTTT
TTGCCCCACCGCGTGGCTTTTTTCCCCCACCGCCGCGGCTGAGGGCGGATTGGCAGACTCGGCTGCTAGA
TCTACCGCGTCTTGGCTAAGGACGCGCGACGGTCACTCTGCTCCAGCTCTCTGGTTCGGGGGCTGCATAGA
GCAGCGCAAGCTCGGCCCGATGGGAGAGAAGAAGGAGAGCGGTGAGGGGGTGACCGGCTATTGCGGAGGA
GGCGCAGGGGCCGAGCCAGCCGGTGCTGACGAGTGCGGCGAGCTCCAGAAGCTCATTTGGCATCTCCTTTGGC
AGCTGCTGTGGCTGCGCACCAAGTGCCTGAGTCCAAAGACCTCACCCAGCAGGAGATACGGACCGTGCCAGAT
GAGTCCGAGGGGCTCCTAGGCACAGAGGGGCCCTTGAGGAAGAAGAGGATGGAGAGGAGCTCATTTGGAGATGGC
ATGGAAGGTAA

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FIGURE 1533

ATGGATGAGGACAGCTGTGTCAATGCCAGGCCACGGGAACCTCCACTTGCTAAACAGAATGTTATCCCGGAAATC
TGTGCCCTTCTCTGTATGCCTCTTGTCTTTTTCTACTGCCCTATTAGTAACCTCACAAATATATAATGAGCAC
CTGCCAAGAACCATGTCAGGCCCTGGGGCAACAAACAGCCCTGCTGTCAAGGAACCCGAGGCTTGTGGGGCCGT
CATGCTATCAAAAAGCAGCTCCAAGAGAGACAGTGGGATGAGTGTCAAACAGATGTTTCAGCCAAGTATGGCAGG
AGCTCAGAGGAGGCCCTCATCACTTGTGTGCTGGGACAGCGCTGGCTGGTCTGCCACCTCCACCCAGCCCT
CCCTGTGCGCTGCTGCCAGAATGTCTTCTGAAACACAGCTATGACTGGGCCCTACTGGCCCTTGGCTGTTGATCTA
AGCAGAGGCCCTAACTGAGACTGAACAAAGCAITTTTCTCTCCCAGGAATTGGAATTTTGGAAACCAGAAATGAGC
ACCTCTGCAGCCAAGGCCCATGAGCAATGGCACCTTGAGGAGAAGCCCAAGAAGCAGACCTGGTTCAGCCCT
TTCACCGCCCGGGTGCCACGGCCCTTCAACGTGTATGGCAGGAGGTGTGCAGGSCATTGAGGAGCCCTCCTGG
CTGGCACTCGACCCAATTAGTCATTCAACGCCAGGTCTGGGGCTGCTGTCTGTCTCAAAGCCCATCTGTGAA
CACATGGTAGAGTCTCCAACCTGTTCCAGATGTCCAACCTGGTCTGCGGCACTGATGGGCTCACATATACGAAT
GAATGCCAGCTCTGCTTGGCCCGGATCCTGTTGAATTCTTCGGCCAAGTGAGGTACAGACCAGGGCCCTATGAA
CACCTGCAAGCAAGACAGCCACGCAGTTGTGGGTACCTTGGAAGAATAATTGAGAAATGCAAGAGAGAACAGGGC
AGCAGTGAACCAAGTTGTCCAAGACCTGGCCAGGTGTTGAAGAGGTATAGGGGTTCCACAGCTCTTTTCAGAAA
CTCATATTTAAGGTTTTACTATGCCCAACAGAAATCCTGATGGGAAAGGAAAATGCCTTGCTATATCTGTAAT
TATCAACATGAAAACATTACGGTTTTTAATCATAAAATTCAAGAGATTTAACTTGTTGCCATCAGTTCTCCACCA
AGGAAAGATAAGTTGATATTGCCAGCCTTTCATGAGCTTCCTCCTAACAGTAGGCTTATCGCCTTTGCACATTCC
TATAGCAGAGAACATAGATCTGACTGCCTTAAGGATACCAATTTCCTCTCTCTTCAAATTCATCATCTCTAGT
GGGCAACAGAAAGCCAGAAAATCCTGCCAAAACCTTTCATCTGGTCAGGGAGTGGAGGCCGTGCTGTGCGCGCC
CTCTTGGCGGAGCCACAGGCAAGCATCTTAAGAGGGGCAAGCGGAAAGGGTGTCTGTGGATCTGCCCTGTCT
GGTGGTTTTCAGGCAGCCCTGCTTCTTCCCGCCTGGCAGTCAGCAGGGGGGAGAGTCACTCAGAGCAAGATGGA
GAGCCTTAG

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FIGURE 1534

CAGAAGAAGCCCTTTGAGGAGCACTGGAGGAAGCACACCTGTCTATGTGGACGTTGGCACTGGGAAGTGCACA
GCCAGAGAACAACATCACACACAGGAACAGTTGTGCTCATGTGATGGGGCCCTCAGCACTAGGAAGGAGTGG
ACTATTGGCACAGCAGCAGCTTGAATAAATCTGAAAGTCATATGCTGTGTAAGAGAAGCCAAATTTAAAAAGT
GCATGCTGTGTACAGAGGGTGTCAAGAATGCCTCTACGTGACGGAAAGCAGATCCGTGGTTCCTGCAGACTGG
CAGGAGCAGATTCCAAAGGCACAGGAAGAAGCTTGTGGGTAGAATGTGTTCAATACCTTCTGTGCATTATACCAT
AAAAAAGCTGGTCACAAAATGCAAAACCAAAACAAAGGTGAACTAGGATAAGATTTCTCACCTGTGTGATTGG
TAAACGTGCAGATGTGCCGTGATGCTTTGTTTATGAAGCTGTGGGATACAAGGACTCTCATACGTCACTGTGGAA
TGCAGAATATTGCAGCCTCATGGAAGAGGATTGGCAGCGTCTAACAAAACTACATGGCATTGGCCCTTTGACTC
AGCAATTCTAGAATCTGCCTCAAAAAAATCCAGCAAGAATAAGAAAGACTTTAGGCACAGAGTTCTTTTCACA
GCCTGCATGTGTTTGCAACAAGTTCTTCACTGTGGCGTTTGTAATGTGGGGAAAGAGAGATCAGGCTGGTAC
TGTGTCTGTGTAGAAAAGGAGGACGTAAGAAATCCATTTTGATCTGTACCCGAGCGATTGTTTGGCCCTGAGA
TGCTGTTAATCTGTAACCTTAGCCCCAGCCTTGAGCTCACAGAAACCTGTGTTGTATGGAATCAAGGTTTCAGGG
ATCTAGGGCTGTGCAGGACGTGCCCTTGTAAAGAAAATGCTTACAGGCAGTACGCTTGGTAAAAAGTTATCGCCATT
CTCCATTCTCGATAAACCCAGGGGCACAATGCACTGCGGAAAGCCGAGGACCTCTGCCAGGAAAGCCGGGTAC
CATCCAAGGTTTCTCCCACCTGAGATATGGCCTTGTGGGATGGGAAAGACCTGACCATCCACCAGCCGACACCC
GTGAAGGATCTGTGCTGAGTAGGATTAGTAAAGAGGAAGGCCCTGTCTCCTGCCTTCCCCTGGGAACGGAATG
TCTCAGTATAAACTGATCGTACATTTGTTCAATCTGAGATAGGAGAAAAACCCCTGTGGTGGGAGGCGAGA
CATGTTGGCCGCAATGCTGCTTACTCTTTACTCCACTGAAATGTTTGGGTGGAGAGAAGCATAAATCTGGCCT
ACGTGCACATCTAGACATAGTACCTTCCCTTGAACCTACTGTGACACAGATTCCTTGTCTCACATGTTTCTTG
CTGACCTTCTCCCCACTGTACCCCTGTTCTCCTGCCACATTCCTCTTGCTGAGATAGTAAAAATAGTAATCAATA
AATACTGAGGGAATCAGAGACCGGTGCCAGTGCGGGTCTCTGTATGCTGAGCGCCAGTCCCCTGGGCCCACTT
TCTTTCTCT

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FIGURE 1535

AATAAAGAAATAGTGCCTTTAAGTCAATGAATTCCTCCTGGGACCCACTATCGAGAAATATCAGTGGTAACGTT
TTAAAAATGACAAATCAATCTGCTCTTGACTTGTGTGTCTTAAGATTTCACCTAAGTGCTTCAAACTCCTCC
CTCCCCGGCTTCTGGATAATAGAAGTTCGGAAGGCCGCGGATTCCAGAAGATACTGTCTGGCGTGAAATTTAGT
CTCAGTAGAAACATAAGTCCCGCGCGTCTTGTGCTGCGCGTGCAGAGCTTTTGGGCCCTCCCGAGAAAGGGGAAG
TGCATTCTCGCTCCGTAGCGGTCTCCGCCGGTGGGGGGAAGTAATTCCGGTTGTTGCACCATGGCGTCCATGG
GGACCTCGCCTTCGATGAATATGGGCGCCCTTTCCTCATCATCAAGGATCAGGACCGCAAGTCCCGTCTTATGG
GACTTGAGGCCCTCAAGTCTCATATAATGGCAGCAAAAGGCTGTAGCAAAATACAATGAGAATCACTTGGACCAA
ATGGGCTTGATAAGATGATGGTGGATAAGGATGGAGATGTGACTGTAACATAATGATGGGGCCACCATCTTAAGCA
TGATGGATGTTGATCATCAGATTGCCAAGCTGATGGTGGAACTGTCCAAGTCTCAGGATGATGAAATGGAGATG
GAACCACAGGAGTGGTTGTCTGGCTGGTGCCCTTGTTAGAAGAAGCGGAGCAATTGCTAGACCGAGGCATTACCC
CAATCAGAATAGCCGATGGCTATGAGCAGGCTGCTCGTTGTGCTATTGAACACCTGGACAAGATCAGCGATAGCG
TCCTTGTTGACATAAAGGACACCGAACCCCTGATTGACAGCAAAAAACACGCTGGGCTCCAAGTGGTCAACA
GTTGTACCGACAGATGGCTGAGATTGCTGTGAATGCCGTCTCTACTGTAGCAGATATGGAGCGGAGAGACGTTG
ACTTTGAGCTTATCAAGTAGAAGGCAAAAGTGGGCGGCAGGCTGGAGGACACTAACTGATTAAAGGCGTGATTG
TGGACAAGGATTTAGTCACCCACAGATGCCAAAAAAGTGAAGATGCGAAGATTGCAATTTCTCACATGTCCAT
TTGAACCAACCCAAACCAAAACAAAGCATAAGCTGGATGTGACCTCTGTGCAAGATTATAAAGCCCTTCAGAAAT
ACGAAAGGAGAAATTTGAAGAGATGATTCAACAAATTAAGAGAGCTGGTGCTAACCTAGCAATTTGTGAGTGGG
GCTTTGATGATGAAGCAAACTCACTTACTTCTTCAGAACAACTTGCTGCGGTTGCGGTAGGAGACACTGA
TTGAGCTGATTGCCATGCAACAGGAGGGCGGATCGTCCCCAGGTTCTCAGAGCTCACAGCCGAGAGACTGGGCT
TTGCTGGTCTTGTACAGGAGATCTCATTTGGGACAACTAAGGATAAAATGCTGGTCATCGAGCAGTGTGAAGAACT
CCAGAGCTGAACCAATTTTATTAGAGGAGGAAATAAGATGATCATTGAGGAGCGGAAACGATCCCTTCACGATG
CTTTGTGTGTCATCCGGAACCTCATCCGCGATAATCGTGTGGTGTATGGAGGAGGGGCTGTGAGATATCCTGTG
CCCTGGCAGTTAGCCAGAGGGCGGATAAGTGCCCCACCTTAGAACAGTATGCCATGAGAGCGTTTGGCCAGGCAC
TGGAGGTCATCCCCATGGCCCTCTCTGAAACAGTGGCATGAATCCCATCCAGACTATGACCGAAGTCCGAGCCA
GACAGGTGAAGGAGATGAACCTGCTCTTGGCATCGACTGTTTGCAACAGGGGACAAATGATATGAAGCAACAGC
ATGTCATAGAACCCTTGATTGGCAAAAAGCAACAGATATCTCTTGCAACACAAATGGTTAGAATGATTTTGAAGA
TTGATGACATTCGTAAGCCCTGGAGAACTGAAGAATGAAGACATGAGAAAACTATGTAGCAAGATCCACTTCTG
TGATTAAGTAATGGATGCTCGTGATGCATCTACAGTTATTTATTGTTACATCCTTTCCAGACACTGTAGATG
CTATAATAAAAAATAGCTGTTTGGTAACCATAGTTTACCTTGTTCAAAGCTGTGTAATCGTGGGGGTACCATCTCA
ACTGCTTTTGTAATTCATTGTATTAAGAAATCTGTTTAAACAACCTTTATCTCTCTCGGGTTTGAAGAACGTT
TATTGTAACAGTAATTAATGCTGCCTTAATTG

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FIGURE 1536

MASMGTLAFDEYGRFFLI IKDQDRKSRLMGLKSHIMAAKAVANTMRTSLGPNGLDKMMVDKDGDTVITNDGA
TILSMMDVDHQIAKLMVELSKSQDDEIGDGTGVVVLAGALLEEAQLLDRGIHP IRIADGYEQAARVAIEHLDK
ISDSVLVD IKDTEPLIQAKTTLGSKVVNSCHROMAEIAVNAVLTVADMERRDVFELIKVEGKVGGRLEDTKLI
KGVIVDKDFSHPMPPKKVEDAKIAILTCPFEPKPKTKHKLDTSVEDYKALQYKEKEFEEMIQQIKETGANLA
ICQWGFDDANHLQLQNNLPAVRWVGGEPEIELIAIATGGRIVPRFSELTAELGFGAGLVQEISFGTTDKMLVIE
QCKNSRAVTIFIRGGNKMIIEEAKRSLHDALCVIRNLIRDNRVYGGGAEEISCALAVSQEADKCP TLEQYAMRA
FADALEVIPMALENSGMNP IQMTTEVRARQVKEMNPALGIDCLHKGTDNDMKQHVITLIGKKQQISLATQMV
MILKIDDIRKPGEESE

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FIGURE 1537

GTATCTGTCCGGACGGAAGCAGGAAGCGGGAGCGTAGGGCCACGCGCTGCGGCGCTGCTGGTTGAGGCTGTGTGGG
TCGGGGACGGGCCGAGGCGATGCGGAGAAGTTTGACCACCTAGAGGAGCACTGGAGAAGTTCGTGGAGAACAT
TCGGCAGCTCGGCATCATCGTCAGTGACTTCCAGCCAGCAGCCAGGCCGGGCTCAACCAAAAGCTGAATTTTAT
TGTTACTGGCTTACAGGATATTGACAAGTGCAGACAGCTTCATGATAATTACTGTACCGTTAGAAGTTTGTGA
ATATATAGATCAAGTCGAAATCCCCAGCTCTACACCAAAGAGTGCGCTGGAGAGGGCTCTAGCTAAAAATGAGCA
AGTTAAAGGCAAGATCGACCCATGAAGAAATTTAAAGCCTGTGATTCAAGAACTTTCTAAAGTATTTCCGGA
AGACATGGCTAAGTATCGAAGCATCCGGGGGAGGATCACCCGCCTTCTTAAACAGCTCACCCCTCCTGTGTGAA
GATCCCCGGGACTGCGATGCGGCGTGAGGCTGGGACTGCGAGTGTGACGCCACCTTCCTGCTGAGGTGGGACT
GGGCCCTGGACACACCCCTCAGCCCTCTGTCTCTATTGTTTGGCCTCATGGGACCGAGGGCTGGAGGAGAGGC
GGAGCTGTGCCCGAGCTGTTCCAGCAGCTTGCTGCGCTCAACTGGCTTTCAGAGTGCTGACCCCTCATCACTGT
GGGGATCATTCTCTCTGAGGGCAGATGAGGCGCAGGAAAAATAGTCTTGGAATGTTAAATATGATGGGTAAATTA
AAAGTTTACAACATTCTACCTAATATTTTCTTTTAACTACTTTTCTGTCTATTGTATTATGGTGCCGAA
AGCTAAATAACGACTAGGAAAAATTTTTTAAAAAAGAAAAATCAGTTTAAATGTGGGAAGTACTTAAGTGGTAT
TATATTTTACATTTTCAAGTATAGTGCAAAAGAAATGTTTTAAATGTAACGTGTTTTCATGGATTTCAATTAGACA
TGCCTATAATAAACTAAGTATGTGGCTTATTCATGTAATATTTTTGTAATATAATACAATGTGCTCTGT

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FIGURE 1538

MAEKFDHLEEHLEKFVENIRQLGIIVSDFQPSSQAGLNQKLNFIIVTGLQDIDKCRQQLHDITVPLEVFEYIDQGR
NPQLYTKRECLERALAKNEQVKGKIDTMKKFKSLLIQELSKVFPEDMAKYRSIRGEDHPPS

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FIGURE 1539

GGGATTGTGTTATTGCGAATGATGTGGACAACAAGCGTGCTACCTGCTCGTCCATCAAGCCAAGAGGCTGAGCAG
CCCCTGCAATCATGGTGGTCAACCATGATGCCTCCAGCATACCCAGGCTCCAGATAGATGTGGACGGCAGGAAAGA
GATCCTCTCTCATGTATCGAATTTTATGTGATGTCCCTTGCACTGGAGACGGCACTATGAGAAAAACATTGATGT
TTGGA AAAAGTGGACCACCTTAAATAGCTTGCAGCTACATGGCTTACAGCTCGGGATTGCAACACGCGGGGCTGA
ACAGCTGGCTGAAGGTGGAAGGATGGTGTATTCCACGTGTTCACTAAACCCATTAGGAGTGAAGCAGTCATAGC
ATCTTTACTGGA AAAAGTGAAGGTGCTTTGGAGCTTGCTGATGTGCTAATGAACCTGCCAGGGCTGAAGTGGAT
GCCTGGAATCACACAGTGGAAAGTAAATGACGAAAGATGGGCAGTGGTTTACAGACTGGGACGCTGTTCTCCACAG
CAGACACACCCAGATCCGACCTACCATGTTCCTCCGAAGGACCCAGAAAAGCTGCAGGCCATTGCACCTGGAGCG
ATGCCTTAGGATATTACCCCATCATCAGAATACTGGAGGGTTTTTTTGTGGCAGTATTGGTGA AAAAATCTTCAAT
GCCGTGGAATAAACCGTCAGCCAAAGCTTCAGGGTAAATCTGCAGAGACCAGAGAAAGCACACAGCTGAGCCCTGC
AGATCTCAGAAAGGGAACCCACAGATCCCTCTAAGCTGGAAGTCCGTCATTACAGGAAC TGGTGACACAGA
AATAGCTCATGCAACTGAGGATTTAGAGAATAATGGCAGTAAAGAAAGATGGCGTGTGTGGTCTCTCCATCAAA
GAAAATGAAGTTATTTGGATTAAAGAAAGATCCATTTGTATTTATTTCCCTGAAGATGACCCATTATTTCCACCTAT
TGAGAAATTTTATGCTTTGGATCCTTCATTCCCAAGGATGAATTTGTTAACTCGGACTACAGAAGGGAAGAAAAG
GCAGCTCTCATATGGTTTCTAAGGAGTTGCGGAATGTGCTGCTGAATAACAGTGAGAAGATGAAGGTTATTAACAC
GGGGATCAAAGTCTGGTGTAGAAAATAACAGCGGTGAAGAGTTTGACTGTGCTTTCCGGCTGGCACAGGAGGGAAT
ATATACATTGTATCCATTTATTAACCAAGAAATATTACTGTATCAATGGAAGATGTTAAGATACTGTTGACCCA
GGAAAATCCCTTTTTTAGAAAACCTCAGCAGTGAGACCTACAGTCAAGCAAAGGACCTGGCAAAGGAAAGCATCGT
GCTGAAGTATGAACAGATTCTGCGAATCCAGACGCTCTGCAGTGTCCCATCGTCTTATGCGGATGGCGGGGAAA
GGCCTCCATTGCAACTTTTGTGCCAAGAATGAACGGCTTCATTATCTCAGGATGATGGGGCTGGAGGTATTGGG
AGAAAAGAAAGAGGAGGGGTTATCCTCAAAATGAGAGTGCAGCCAGCACCGGACAGACAATGACGTGAC
TGAGGGACAGAGAGCAGGAGAGCCCAACAGCCAGATGCAGAAGAGGCCAACAGTCCAGACGTGACAGCAGGCTG
TGACCCGGCGGGGGTCCATCCACCCCGGTGAGCAGGCCCAAGGCAGCGGGGGCCACACCCCTCACACGCAAAAC
TGGCTTCTCTGCTCACTGGTGTCTGAAACCAAAATCCAGAGCAGCCTGTGGCCTGTAAGCATATATTTCTAAATG
ACTGCAGACTGGTGGGATCATAGGAGCCTTCTGAATGACAGGACTGCTTTCTTTGGAGCTGATGAAAATGTACT
CTTTTAGCGTGTAGAAACTACTTGTTTTATTTTGTGTTCTTTGGCCAAGCTGGGCTAGTGTGTTCTTTTGTCTGGG
AATAGACTTTCAAAAGTTGTACTTCTATCAAGAAACAAAACCTGCCCTTGCAAGAAATTTACAGTCTTTTGTGTAAGC
CTGTATTGGCTTAAAGGTGCAGTATTTTAAATATTATTATAGAAAGAATCTATAAATCTTGGGGAAAGTG
GTTATAAGCTTTAATAATTACATTGAGCTGCACCTCAGTGGTGTGTCATTAACTGCAGTGGGGTTAATCTCGA
GGCCTCAGATGACTTTGTGCCCTTTTGGAAATAAGGGTAAATAAACTCTCCAGAGTAAAGCTGTATCTGTGAAT
TGTCATACTAATTATTAGGGGGGACTATGTGCTTTTATGAATGGAGTGCTTTACAATTTTTATTTTAAATGG
GTTTGGGATCCTTGGAAATTTTCAATAAAATGATAAAAAT

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FIGURE 1540

TCCTGCTTCGCCCTCCCAGCGCCTAGAAGCCTGCAGCTCCGGAGCAGTGGCCGCGCCACGCCGGCCCCAGCGCGC
AGAAACCTGCAGGCCCCGCCGTCCGCCCCGGGCCGCCGCCACTGTCTACCCGCAAGTTTGGATACCCCTACT
CCTCGGCTCCCCAGTTTCTTGATGGCCACCAACTCCTTGAGCACGTGCTGCGAGTCCGGAGGCCGCACGCTGGCGG
ACTCCGGGCCCGCGCCTCGGCCAGCGCCGGTCTACTGCCGGTCTACGAGAGCCGGCTGCTGGCCACCGCGC
GCCACGAGCTCAACTCGGCCGCGCGCTGGCGTCTATGGGGGTCCCTATGGCGGATCGCAGGGCTATGGCAACT
ACGTGACCTACGGCTCGGAGGCGTCCGCCCTTCTACTCGTGAACAGCTTTGATTCGAAGATGGTTCGGGATCTG
CGCATGGGGGCCCTGGCACCAGCCGCTGCCGCTACTACCCCTACGAGCCAGCTCTGGGCCAGTACCCCTATGACA
GGTATGGAACCATGGACAGCGGCACGCGGCGCAAGAACGCCACGCGCGAGACCACGACGACGCTCAAGCCCTGGC
TGCAGGAGCACCGCAAGAACCCCTACCCACCAAGGGCGAGAAGATCATGCTGGCCATCATACCAAGATGACCC
TCACACAGGTCTCCACCTGGTTCGCCAACGCGCGCCGGCGCTCAAGAAGGAGAACAGATGACGTGGCCGCCG
GGAAACAAGTGCAGACAGAGAAGCGGCCCTACGCGGAGGGCGAGGAGGAGGAGGGGGGCGAGGAGGAGGCGCGG
AGGAGCCCCCTCAAGAGCTCCAAGAACGACAGAGCCCGTGGGCAAGAGGAGAAGGAGCTGGAGCTTAGTGACTTGG
ACGACTTCGACCCCGCTGGAAGCAGAGCCGCCGCGCTGCGAGCTGAAGCCGCCCTTCCACTCCCTGGACGGCGGT
TGGAGCGCGTCCCCGCCGCGCCGACGCGCCGGTCAAGGAGGCTCAGGCGCGCTCCGGATGTCTCTGGCCGCGG
GTGGCGGAGCTGCTCTGGACGAGGACCTGGAGAGGGGCCGAGCTGTCTCCGACGCGCGCGGCCGCCGCGGAGC
CACTGCCGGGCGCAGAGGGCGGCCCTCAGGTCTGCGAGGCCAAGCTGGGGTTTGTCCGCGCGGGGCGCTCGGCAG
GCCTGGAGGCTAAGCCGCGCATCTGGTCCCTGGCCACACAGCCACC CGCGCGCCCGCCGACCTCCCTGA
GCCAGACTGAGTTTCCGTGTCATGCTCAAGGCCAAGGTCCCGCGGCCCTGCGGTGTGTCTCTCGCGCCG
CCACGTCCCCGTGTGGGCCCTTCCCACTCTGGCGCCCTGGACAGGCACAGGACTCCCGGTAAACAGTCTCA
GAAACTGGGTGGACGGGGTCTTCCACAGCCCCATCCTCAGGCACAGCACTTTGAACAGGCCCTGGGCCACCGCCA
AGGGCGCCCTCCTGGACCCCGGGCCTCTGGGACGCTGCTGGGGCGGGCGCAACGTGCTGACTGCACCCCTGG
CCCGCGCCCTTTCGCGCTGCGGTGCCCGCAGGACGCCCCAGCTGCAGGCGCGCCGAGGAGCTGCTCGCCCTGCCCA
AGGCGCGCGGCAACCCCTTCTCGCCTGAGGCGGGCGGGTCCCGAGCCCAAGGAGGGAACCCGCGCTCAGGCGGAC
GGCGCCGACTCTTTTCACTGAGTTTCCAGAGGAAGACTAGCGCGGCCACCGCAAGCGGCCAACCCACCGGAGAG
GGGGCTTCTGAACTGGACTCCTGGGAACATGGACAAGCCCGCGCTGCCACGCCGGGGCTCCACCGCCTGGGC
CTGAGCCTGACCGGGGCCATTCCCAATTGGGACGCGGAAGGAGAGGCTCTCGGAGCAGAAGAGGCCAGATACCC
TGAAGCATAAAGTTTACGTCAAAGTTTACATGGAGAAGCGGTTCCGGTCTGAAGCGTGGTCTGCTGTCCCTG
GGCGTGAGGCTCCTGGGCGTGTGGGCTCCGATTTTCACTCAGCAGCTAATGCTCACCACAGCACTTGCAC
TGAGTTGACTCTTGACACTCTTGACTCCATAATATGATGCTTTTAAAGATGTATGTTACACCAATAATTGCTT
GCTTCAGAGGCTAATAATAACAAACCAATAAACCGAG

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FIGURE 1541

GACTGCGCGGCGGCAACAGCAGACATGTCGGGGTCCGGGGCTGTGCGGGCTGCTGAGCGCTCGGCGCCTGGCG
CTGGCCAAAGCGGTGGCCAAACAGTGTGGCAAAACAGGAACCCGAGGTTTTCACTTCACTGTTGATGGGAACAAGAGG
GCATCTGCTAAAGTTTCAGATTCCATTCTGCTCAGTATCCAGTAGTGGATCATGAATTTGATGCGATGGTGGTA
GGCGCTGGAGGGCGAGGTTGCGAGCTGCATTGGCCCTTCTGAGGCAGGGTTTAATACAGCATGTGTACCAAG
CTGTTTCTACCAAGTTCACACACTGTTCAGCAGCAGGAGGAATCAATGCTGCTCTGGGGAACTGGAGGAGGAC
AACTGGAGTGGCATTCTCAGACACCGTGAAGGGCTCCGACTGGCTGGGGACCAGGATGCCATCCACTACATG
ACGGAGCAGGCCCGCGCGCTGGTCGAGCTAGAAAAATATGGCATGCCGTTTAGCAGAACTGAAGATGGGAAG
ATTTATCAGCGTGCAATTTGGTGGACAGGCTCAAGTTTGGAAAGGCGGGCAGGCCCATCGGTGCTGCTGTGTG
GCTGATCGGACTGGCCACTCGCTATTGCACACCTTATATGAAGGCTCTGCGATATGATACCAGCTATTTTGTG
GAGTATTTTGCTTGGATCTCCTGATGGAGAAATGGGGAGTGGCGTGTCTATCGCACTGTGCATAGAGGACGGG
TCCATCCATCGCATAAGAGCAAAGAACACTGTTGTGCCACAGGAGGCTACGGGCGCACCTACTTCAGCTGCAG
TCTGCCACACCAAGCACTGGCGACGGCAGCGCCATGATCACCAGGGCAGGCCCTTCTTGCACGAGCTAGAGTTT
GTTCACTCCACCTACAGGCATATATGGTGTGCTGTTGTCTCATACGGAAGGATGCTGTGGAGAGGGAGGCATT
CTCATTAAACAGTCAAGGCGAAAGGTTTATGGAGCGATACGCCCTGTGCGGAAGGACCTGGCGCTAGAGATGTG
GTGTCTCGGTCCATGACTCTGGAGATCCGAGAAAGAGAGGCTGTGGCCCTGAGAAAGATCAGCTCTACCTGCAG
CTGCACCCTACCTCCAGAGCAGCTGGCCACGCGCTGCTGGCATTTCAGAGACAGCCATGATCTTCGCTGGC
GTGGACGTACGAAGGAGCCGATCCCTGTCTCCCAACCGTGTCATTATAACATGGGCGGCATTCCCAACCACTAC
AAGGGGACAGTCTGAGGCAGTGAATGGCCAGGATCAGATTGTGCCCGGCTGTACGCCCTGTGGGGAGGCCGCG
TGTGCCCTCGGTACATGGTGCCAAACCGCTCGGGGCAAACTCGCTCTTGGACCTGGTTGTCTTTGGTGGGCATGT
GCCCTGAGCATCGAAGAGTCTATGAGGCTGGAGATAAAGTCCCTCCAATTAACAAACAGCTGGGGAGAAATCT
GTCATGAATCTTGACAAATTGAGATTTGCTGATGGAAGCATAGAACATCGGAACCTGCGACTCAGCATGCAGAAG
TCAATGCAAAATCATGCTCGCGTGTCCGTGTGGGAACCGTGTGCAAGAAGGTTGTGGGAAATCAGCAAGCTC
TATGGAGACCTAAAGCACTGAAGACGTTCCAGCCGGGAATGGTCTGGAACACGAGCTGGTGAGACCTGGAG
CTGCAGAACCTGATGCTGTGTGCCCTGCAGACCATCTACGGAGCAGAGGCAAGGAGTACCGGGGCGCGCAT
GCCAGGGAAGACTACAAGTGGCGATTGATGAGTACGATTACTCCAAGCCCATCCAGGGGCAACAGAAGAGGCC
TTTGAGGAGCACTGGAGGAAGCACACCTGTCTCTATGTGGACGTTGGCACTGGGAAGGTCACTCTGGAAATAGA
CCCGTGTATCGACAAAACCTTTGAACGAGGCTGACTGTGCCACCGTCCCGCAGCCATTGCTCTCTACTGATGAGAC
AAGATGTGGTATGACAGAATCAGCTTTTGTAAATATGATATAATAGCTCATGTCATGTGCTCATGCTAATCTGTC
TTCATACGCTTCGCACTCTGGGGAGAAGGAGTACATTGAAGGAGATTGGCACTAGTGGCTGGGAGCTTGCC
AGGAACCCAGTGGCCAGGAGCGCTGGCACTTACCTTTGTGCCCTTGCTTCATTCTGTGAGATGATAAACTGGGC
ACAGCTCTTAATAAATAATAATGA

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FIGURE 1542

MSGVRLSRLLSARRLALAKAWPTVLQTGTRGFHFTVDGNKRASAKVSDSISAQYFVVDHEFDVAVVVGAGGLR
AAFGLSEAGFNTACVTKLFPTRSHTVAAQGGINAALGNMEEDNWRWHFYD TVKGS DWLGDQDAIHYMTEQAPAAV
VELENYGMPFSRTEDGKIYQRAFQQSLKFGKGGQAHRCVVADRTGHSLLHTLYGRSLRYDTSYFVEYFALDLL
MENGECEGVIALCIEDGSIHRIRAKNTVVATGGYGRTYFSC TSAHTSTG DGTAMI TRAGLP CQDLEFVQFHPTGI
YGAGCLITEGCRGEGGILINSQGERFMERYAPVAKDLASRDVVSRSMTLEIREGRGCGPEKDHVYLQLHHLPEQ
LATRLPGISETAMIFAGVDVTKEP IPVLP TVHYNMGGIPINYKGQVLRHVNGDQIVPGLYACGEAACASVHGAN
RLGANSLLDLVVFRACALSTIEESCRPGDKVPP IKPNAGEESVMNLDKLRFADGSI RTSSELRLSMQKSMQNHAAY
FRVGSVLQEGCGKISKLYGDLKHLKTFDRGMVWNIDLVEITLQLNMLCALQTIYGAEARKESRG AHAREDYKVR
IDEYDYSKPIQQQKKPFEEHWRKHLSYVDVGTGKVITLEYRPVIDKTLNEADCATVPPAIRSY

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FIGURE 1543

CTGGAGCTGCAGAACCTGATGCTGTGTGCGCTGCAGACCATCTACGGAGCAGAGGCACGGAAGGAGTCACGGGGC
GCGCATGCCAGGGAAGACTACAAGGTGGGCTTCTCACCACGCCACCTGCACCTGCCTTTTCCTGCCACCTGGT
GGGACTCAGCCCCACCCCTGCATTTTCTCTGCATTTTCTTTCGTTGCCCCAAAAGTAAATCCAAAAATGCCTTT
TCCCCCCTGGTAACITTTGATCCCTGGGTTCTCGCCATCTCTGGATCACTGTGACCTTTTCCTTGCTTTGGGTC
GGCATCCACTGATGCCAGCAGTGGCATCTCCAAGCCAAATGTGCTTTGCTGTTAGAAGGCCAAGGTTAGAAGTGCA
GCTAGAGTGGCAAGACCAGGAAATAAATGCCAGTTTATTAAATAACGAGTAAGCCACCGTTTCAAACCTGCCCTGTGGAGGAAATGCCAGTTT
TGGAGGAAATGCCAGTTTATTAAATAACGAGTAAGCCACCGTTTCAAACCTGCCCTGTGGAGGAAATGCCAGTTT
ATTAAATAACGAGTAAGCCACCGTTTCAAGCCTGCCCTGTGGAGGAAATGCCAGTTTATTAAATAACGAGTAAGC
C

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FIGURE 1544

TTTACGATATCCAAATAAACTGGACACCATCACATGGACGTGGCAAGGACCTGGAGCGCTGGAAATCCTGTGGGCT
CACGCTGTGTAGTTTACACACCAGTGGAAATCGAGTTCTCTCTGTGTACAGCCCTTCTGAGAGGAGAAGAG
GAACCCCGCGCTGTATGCCAGCAACGTGCGCGAGTCA TGCCGAGGCGCTTGGGTGTCTCCGTGACTGACTACAG
GTTTCGAGGACTGCCAGCTGGCCCTGGCGGAAGGACAGCTCCGCTCCCCGTGACACTTGGCTTTTAGAATTTGCG
CAGGCTCGTGC GGGGCTCGGGCTAAAACAGAAAAGCTTGAAGATCTGGACAGATACTCAGAAAGAGCCAG
GATGAAGGAGAGAGAGAATAGTTATGGGAGTTTGGCGCTCCCTGGAAATCCCCGTTTCTGACTTGTGGA
AGACATGTTTTCACGTGTTCGACGAGAGCGGAGCGGCGAGGTGGACCTGCGAGAGTGTGTGGTTGCCCTGTCTGT
CGTCTGCCGCGCGCCGACCTTGGACACCATCCAGCTGGCTTCAAGATGTACGGAGCGCAAGAGGACGCGAG
CGTCCGCGAAGGTGACCTGTCTCGCATCTCAAGACGCGCTGGGGTGGCAGAGCTACCCGTGACCGACCTATT
CCGAGCCATTGACCAAGAGGAGAAGGGGAAGATCACATTCGTGACTTCCACAGGTTTGCAGAAATGTACCTTGC
CTTCGACAGAGGAATACCTGTACCCGGATCAGACACATTTGAAAGCTGTGCGAGAGACCTCACCTGCCCAATCCC
AAACGGCTTCTGTGCGGATTTAGCCCGGAAAACCTCAGACGCTGGGCGGAAGCTGTTCGCAAGAAGCTGGATTA
GGACCCAGGGTTGCGGAGAGACGCGGCCCTCCCGCTGGACATCACCGCATGAGCTCTTTGCGAGTGACCTC
TGGGCTCCGCTCCTCACTCCTGCTGTACAGGCACCTGTCTTCAGCCGAGTTCAGGGGCTCGGGGCTGTTTGT
ATCTTGTCTCTTTGTAAGTGTGTGTGCAGAACCGACGCTTACTGTGCGAGAATCGAGGGCGCGCACGCGGATCC
CCCGCTGGCTGGACCGCTGGGCTCAGGTTCTCCGCGGCGGGGCGCGGCTGCCCGCTGTCTTCCCA
CGGGCCCTGTTTCGAGTCTCTGTACAGCCTCTTCGCGCGGACGCTGCACCGGCGGGCTCCGTGCACACT
CAGCACAGCCTGCCACACAGCGTGCCTTGCCTGTCACTCTGGCAGAACTGTCTGCCCTGTGGATCCACA
GCTTGGCAGAGCCGAGCCGTACCTGATTTTTTCAGTGTTCTACCTGTGTGCTGGAGCTCATGAGTATTTATAA
ACTCCATTTAGGTACTTCAGGAAATGCAGCATTTTTTAAAAATGAAAATGTTTTCTACTTCAATTTTCCT
TTAGAGTCAAGAGATATTTATTTATAGGCTTTTTTTTTTAATATGAAATCTGAGGCTGTTTGGGCTTTGCT
TAAATTTCCATCAGGCTCTCTCCAGCAGGTAATCCCTCTCCTTCCGCTGGGTCCTCGGGAGGTGTGAAGTCA
AGGGCTAGCCCCAAACACTTTTTCTGCTTTTCTTAATCCTTTTCCAGTCCCCCTTTTTTTATAACGTTGGC
AGTTTGATGTTTCTGTTTCGGCAATAACGTAATCCATTTCACTGTAGCCTAACTCCAGTCCGAGGTTGGATATTG
TTCAAATGAGCAGGGCCGAGCTGGAAGCGCAAGGCAGCGCGCGCTGCCGCTCCTCCCTTGCCCTCAGGCCAG
GTCCCTGTCTGGAAGCGCTGATCTCTCTGTACGCCCTGGTTTCCATGGTGACTGGGCTCACGCTGCCACCCGAG
TATGGCTGACCTTCTGTGACAGAGAGGAGCGCGAGTCTTTTGTCTGTGGAAGGAGAGCTGGGCTGTGCGGTGCG
GAGGGTGATGAGGATGTCTGGTGACAGCGGTGCGGACACCATCTCTCTGCGAGCACTGCCCTCCAGCGCCAGGG
TCGCGGGCACATCCCACTGAGAGCGGGGGTCTGCCCATCTTAGAGTCAAAGGCAGAGGGGCTTCCAGGCCCTG
GATGGGGTATTTGGTGTCACCTGAACTCCCTGTGACATCACCTTGTTCATCATTTTATGACAGAATAGAA
ACCCATCTTCAAGCACATAATATCATACAGACTTGAGTTTGCTTCCCTAAAGCAAAAGCTCCGGGTTTGTGTGA
AAATTTTTTTGATTTCGAAATGAATGATTTTTATATTTGGGGCATCTCTATAGAAAGTGACCAACAGGCCAG
TAAGTACGGGAAATAATGTTTACTAATCTCCAGAGATTCTGTATACGCGTTTCTCACTGACAGACATTTAAA
AACACCTTCAGCTCCGTTTCAAGTCAATCAATCACTCGACTTGTTTTATGATGGCAGACTGCCAGCAGGACAG
GGATGGAGTAACCGAAGTCAATTTCAAGGCTCTTGGCGTGTGGACACAGAAGAAATCTAGTGAGCGCTTGG
TAGCTAACAGTCACTGATTTTATAATTTGGAGATGCGTAAGATTCATTTTTCAAGGAGAGCGCTGCAATGG
CCAATGAAGGAGGTAATAAATCAAGATATTCGAGGGAGGGGACCGGCCACTCCCTTCCGAGGTTGAG
ATGAAGGGTTTTTGAATGAATGCCACTGTGCATTTTCAGAAAAAAATCTGTGATAAACAGACTTTGAATGG
ATGTTTGTCTCTCGTATCTCTTTCTCTCTGTGGCGACTTAGAGTTGGCGGATATTCGGAAGCTGTAATGTAC
ATAGCGTTGAGTTAAACCCCTTGTGTGTGAGACAGGACGCGGGGCCCTGGTGGCTGGGGGCGAGACCCGTG
GCGAGTTGGGCGACTGGGCCCTGCGGGGACCTGTGGGGTGTGAGGCGAGAGGAGGGTGGCATGAAGGA
ACTTGGGATTTTCAATGGAATAAGTAAACATAAAGTCTACTTGGG

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FIGURE 1545

GGCGGCTGAGAGCGGGCGGGCGGGGGCGCGGGCGCGGGCGGCCATGTGGAGCGGCCGAGCTCCTTCACCA
GCTTGGTGGTGGGCGTGTTCGTGGTCTACGTGGTGACACCTGCTGGGTGATGTACGGCATCGCTACACCCGCC
CGTGCTCCGGCAGCGCCAACTGCATCCAGCCCTACCTGGCGCGCGGCCAAAGCTGCAGCTGAGCGTGTACACCA
CGACGAGGTCCCACCTGGGTGCTGAGAACACATCGACCTGGTCTTGAATGTGGAAGACTTTGATGTGGAGTCCA
AATTTGAAGAGCAGTTAATGTTTCTGTACCAAAGAAAACGAGAACAATGGGACGCTGTATGCCTACATCTTCC
TCCATCAGCTGGGGTCTGCCGTGGCAGCAGCGGAAGCAGGTGCACCTGGTCAGTCCTCTGACCACCTACATGG
TCCCAAGCCAGAAGAAATCAACCTGCTCACCGGGGAGTCTGATACACAGCAGATCGAGGCGGAGAAGAAGCCGA
CGAGTGCCTGGATGAGCCAGTGTCCCCTGGCGACCGCGGCTGGCGCTGAACGTGATGGCGGACAACCTTTGTCT
TTGACGGGTCTCCCTGCCTGCCGATGTGCATCGGTACATGAAGATGATCCAGCTGGGGAAAACCGTGCATTACC
TGCCCATCCTGTTTCATCGACCAGCTCAGCAACCGCGTGAAGGACCTGATGGTCATAAACCGCTCCACCACCGAGC
TGCCCCTCACCGTGTCTACGACAAGGTCTCACTGGGGCGGCTGCGCTTCTGGATCCCATGCAAGGACGCGGTGT
ACTCCTCGCAGCAGTTCGGGTTTTCAGAGAAAGATGCTGATGAGGTGAAAGGAATTTTGTAGATACCAACTTAT
ACTTCTGGCGCTGACCTTCTTTGTGCGCGTTCCTCTCTTTGATTTCCTGGCCTTTAAAAATGACATCA
GTTTCTGGAAGAAGAAGAAGCATGATCGGCATGTCCACCAAGGCAGTGCTCTGGCGCTGCTTCAGCACCGTGG
TCATCTTTCTGTTCTGCTGGACGAGCAGACGACCTGCTGGTGTGTTCCCGCGGGGTGTTGGAGCCGCCATTG
AGCTGTGGAAGTGAAGAAGGCATTGAAGATGACTATTTTGGAGAGGCGCTGATGCCGAATTTAGTTTGGCA
CTTACAGCGAATCTGAGAGGAAAACCGAGGAGTACGATCTCAGGCCATGAAGTACTTGTCATACCTGCTGTACC
CTCTCTGTGTGGGGGTGCTGTCTATTCACTCCTGAATATCAAAATAGAAGCTGTGATCTCTGGTTAATCAACA
GCTTCGTCACCGGGTCTATGCCTTTGGTTTCTCTCTCATGCTGCCACAGCTCTTTGTAAGTCAAGTTGAAGT
CAGTGGCAGATCTGCCCTGGAAGGCTTCACTACAAGGCTTCAACACCTTCATTGATGACGCTCTTTGCCTTCA
TCATACCATGCCACGTCCTACCGGCTGGCTGCTTCGGGACGACGTGGTGTCTTGCTGTTACCTGTACCAAGC
GGTGGCTTTATCTGTGGATAAACCGCAGAGTGAACGAGTTTGGGGAGTCCATCAGAGGAGAAGGCCACGCGGGCGC
CCCACACGGACTGAAGGCGCGCGGGCTGCCCGCAGCCAAGTGCAACTGAATTGTCAATGAGTATTTTGAAG
CATTTGGAGGAATTCCTAGACATTGCGTTTCTGTGTGCAAAATCCCTTCGGACATTTCTCAGACATCTCCCA
AGTTCCCATCAGTCAGATTTGGAGCTGGTAGCGCTTACGATGCCCCACGCTGTAACAATCTGTCTTGGTCACAG
AGCTGGGTGCTGCCGTCACCTTGAGCTGTGGTGGCTCCCGGCACACGAGTGTCCGGGGTTCGGCCATGTCTCA
CGCGGGCAGGGGTGGGAGCCCTCAGAGGCAAGGGGCTGTGGATTTCATTTCAAGTGGTTTTCTAAGTGCTCC
TTATGTGAATTTCAAACGCTATGGAATTCATTCCGATGGACTCTGGGATCAAAGGCTCTTTCCTCTTTGTTT
GAGAGTTGGTTGTTTAAAGCTTAATGTATGTTCTATTTTAAATAAAAA

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FIGURE 1546

MWSGRSSFTSLVVGVFVVVVVHTCWVMYGI VYTRPCSGDANC IQPYLARRPKLQLSVYTTTRSHLGAENNIDLVL
NVEDFDVESKFERTVNVSVPKKTRNNGTL YAYIFLHHAGVLPWHDGKQVHLVSPLTTYMVPKPPEEINLLTGESDT
QQIEAEKKPTSALDEPVSHWRPRLALNVMA DN FVFDGSSLPADVHRYMKMIQLGKTVHYLPILFIDQLSNRVKDL
MVINRSTTELPLTVSYDKVSLGRRLRFWIHMQDAVYSLQQFGFSEKDADEVKGI FVDINLYFLALTFVAAFHLLF
DPLAFKNDISFWKKKKSMIGMSTKAVLWRCFSTV VIFLFLDEQTSLLVLVPAGVGA AIELWKVKKALKMTIFWR
GLMPEFQFGTYSERKTEEYDTQAMKYL SYLLYPLCVGGAVYSLNLIKYSWYSLNINSFVNGVYAFGFLFMLP
QLFVNYKLKSAHLPWKAFTYKAFNTFID DVFAFIITMPTSHRLACFRDDVFLVYLYQRWLYPVDKRRVNEFGE
SYEEKATRAPHTD

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FIGURE 1547

CTTCCCTTTTGC GGCTATACCGAAGCAGGAGTGGCCAAAATGAAGTTTAATCCCTTTGTGACTTCCGACCGAAG
CAAGAATCGCAAAGGCATTTCAATGCACCTTCCACATTGGAAGGAAGACTATGTCTTCCCTCTTTCCAAAGA
GCTGAGACAGAAGTACAACGTGTGATCCATGCCCATCCGAAAGGATGATGAAGTTCAGGTTGTACGTGGACACTA
TAAAGGTCAGCAAATTGGCAAAGTAGTCCAGGTTTACAGGAAGAAATATGTTATCTACATTGAACGGGTGCAGCG
GGAAAAGGCTAATGGCACAACGTGCCAGTAGGCATTACCCCGCAAGGTGGTTATCACTAGGCTAAAAC TGGA
CAAAGACTGTGAAAAGATCCTTGAACGGAAGCCAAATCTTGCCAAGTAGGGAAGGAAAAGGGCAAATACAAGGA
AGAAACATTTAGAAGATGCAGGAATAAAGTAATCTTATATACAGCTTCGATTAAAAC TTGAAACAAGAAAAA

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FIGURE 1548

CCAGAACACAGGTGTCATGAAACTACCCCTAAAAGCCAAAATGGGAAGGAAAAGACTCATATCAACATTGTCTG
TCATTGGACACGTAGATTCGGCAGGATGCTACAAAATTGGTGGTATTGGTAGTGTTCTCTGTTGGCCGAGTGGAG
ACTGGTATTCTCAAACCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACAGAAGTAAAACTGTCTGAA
ATGCACCATGAAGCTTTGGGTGAAGCTCTTCTGSGGACAGTGTGGGCTTCCATGTCAAGAATGTGTCTGTCAAG
GATGTTCTGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAG
GTGATTATCCTGAACCATCCAGGCCRAAATAAGCGCTGGCTATGCCCTGTATTGGATTGCCACACGGCTCATATT
GCATGCAAGTTTGTCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTC
TTGAAGTCCGGTGATGTGCCATTGTTGATATGTTCTGGCAAGCCCATGTGTCTGAGAGCTTCTCAGACTAT
CCACCTTTGGGTGCTTTGCTGTTCTGTGATATGAGACACACAGTTGCCGTGGGTGTCTCAAGCAGTGGACAAG
AAGGCTGCTGGAGCTGGCAAGGTCACCAACTCTGCCCAGAAAGCTCAGATGGCTAAATGAATATTATCCCTAATA
C

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FIGURE 1549

CGACACAGTAGCATTTGTGCCAATTTCTGGTTGGAATGGTAAACACATGCTGGAGCCAAGTGCTAACATGCCTTG
GTTCAAGGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAAACCATGCTGCTTGAGGCTCTGGACTGCAT
CCTACCACCAACTCGTCCAAGTACAAAGCCCTTGCGCCTGCCTCTCCAGGATGCTACAAAATTGGTGTTATGG
TAGTGTTCCGTGTGGCCGAGTGGAGACTGGTATTCTCAAACCCGGTATGGTGCTCACCTTTGCTCCAGTCAACGT
TACAACAGAAGTAAAATCTGTCGAAATGCACCATGAAGCTTTGGGTGAAGCTCTTCCTGGGGACAGTGTGGCTT
CCATGTCAGAATGTGCTGTCAAGGATGTTGCTGCGTGGCAACGTGTGCTGGTGACAGCAAAAATGACCCACCAAT
GGAAGCAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAAATAAGCGCTGGCTATGCCCTGT
ATTGGATTGCCACAGGCTCATATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAA
TATGGTTCCCTGGCAAGCCCATGTGTGCTGAGAGCTTCTCAGACTATCCACCTTTGGGTGCTTGTGCTGTCGTGA
TATGAGACACACAGTTGGCGTGGGTGTCATCAAAGC

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FIGURE 1550

GCCAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCAATTGGACACGTAGATTGGGGCAAGTCCACCACT
ACTGGCCATCTGATCTATAAATGCAGTAGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGACTGCTGAG
ATGGGAAAGGGCTCTTCAAGTATGGCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATT
GATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTATCACTGATGCTCCAGGACACAGAGACTTC
ATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTCCCGATTGTGCTGCTGGTGTGGTGAATTT
GAAGCTGGTATCTCTAAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACATA
ATTGTTGGTGTTAACAAAATGGATTCCACTGAGCCACCCTACAGCCAGAAGAGATATGAGGAAATTTGTAAGGAA
GTCAGCACTTACATTAAGAAAATTGGCTACAACCCCGACACAGTAGCATTTGTGCCAAATTCCTGAAGTCCGGTG
ATGCTGCCATTGTTGATAATGGTTCCTGGCAAGCCCATGTGTGCTGAGAGCTTCTCAGACTATCCACCTTTGGGTG
GCTTTGCTGTTTCGTGATAAGAGACACAGTTGCGGTGGGTGTC

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FIGURE 1551

AAATTGTTAAGGAAGTCAGCACTTACATTAAAGAAAATTGGCTACAACCCCGACACAGTAGCATTGTGCCAATTT
CTGGTTGGAATGGTAACAACATGCTGGAGCCAAGTGCTAACATGCCCTTGGTTCAAGGGATGGAAGTCACCCGTA
AGGATGGCAATGCCAGTGAACCATGCTTGAGGCTCTGGACTGCATCTACCACCAACTCGTCCAACTGACA
AGCCCTTGC GCCTGCCTCTCCAGGATGTCTACAAAATTGGTGGTATTGGTAGTGTTCCTGTTGGCCGAGTGGAGA
CTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAACAGAAGTAAAATCTGTCGAAA
TGCACCATGAAGCTTTGGGTGAAGCTCTTCTGGGGACAGTGTGGGCTTCCATGTCAAGAAATGTGTCGTCAAGG
ATGTTTCGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG
TGATTATCCTGAACCATCCAGGCCAAATAAGCGCTGGCTATGCCCTGTATTGGATTGCCACACGGCTCATATTG
CATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAACCACT
TTGGGTCGCTTTGCTGTTCTGATATGAGACACACAGTTGCGGTGGG

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FIGURE 1552

CTTTTTACAACGGGTTTGCCGCCAGAACACAGGTGTCATGAAAACCTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCAATTGGACACGTAGATTGGGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCAGTAGCATCGACAAAAGAACCAATTGAAAAATTTGAGAAGGAGACTGCTGAGATGGGAAAGGGCTCTTTC
AAGTATGGCTGGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAA
TTTGAGACCAGCAAGTACTATGTGACTATCACTGATGCTCCAGGATGCTACAAAATTGGTGSTATTGGTAGTG
TTCCTGTTGGCCGAGTGGAGACTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACCTTACAA
CAGAAGTAAATCTGTGCAATGCACCATGAAGCTTTGGGTGAAGCTCTTCCTGGGGACAGTGTGGGCTTCCATG
TCAAGAATGTGCTGTCAAGGATGTTCTCGTGGCAACGTTGCTGTTGACAGCAAAAATGCCACCAATGGAAG
CAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAAGCGCTGGCTATGCCCTGTATTGG
ATTGCCACAGGCTCATATTGCATGCAAGTTTGTGAGCTGAAGGAAAAGATTGATCGCCGTTCTGGTAAAAAGC
TGGAAAGATGGCCCTAAATCTTGAAGTCCGGTGATGCTGCCATTGTTGATATGGTTCCTGGCAAGCCCATGTGTG

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FIGURE 1553

CTTTTTCACAACGGGTTTGCCGCCAGAACACAGGTGTCATGAAACTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTCGGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCAGTAGCATCGACAAAAGAACCCATTGAAAAATTTGAGAAGGAGACTGCTGAGATGGGAAAGGGCTCTTTC
AAGTATGGCTGGGCTTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTGTGGAAA
TTTGAGACCAGCAAGTACTATGTGACTATCACTGATGCTCCAGGACACAGAGACTTCATCAAAAACATGATTACA
GGGACATCTCAGGCTGACTGTGCTGCCGATTGTTGCTGCTGGTGTTTCTCAAACCCGGTATGGTGGTCACCT
TTGCTCCAGTCAACGTTACAAACAGAAGTAAATCTGTCGAAATGCACCATGAAGCTTTGGGTGAAGCTCTTCTCTG
GGGACAGTGTGGGCTTCCATGTCAAGAAATGTGCTGTCAAGGATGTTCTGTCGTGCAACGTTGCTGGTGACAGCA
AAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAAATAAGCG
CTGGCTATGCCCTGTATTGGATTGCCACACGGCTCATATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTG
ATCGCCGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTCCTGAAGTCCGGTGATGCTGCCATTGTTGATATGG
TTCCTGGCAAGCCC

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FIGURE 1554

CTTTTTCACAACGGGTTTGCCGCCAGAACACAGGTGTCATGAAACTACCCCTAAAAGCCAAAATGGGAAAGGAA
AAGACTCATATCAACATTGTCGTCATTGGACACGTAGATTGCGGCAAGTCCACCACTACTGGCCATCTGATCTAT
AAATGCAGTAGCATCGACAAAAGAACCATTGATATCTCCTTGTTGGAATTTGAGACCAGCAAGTACTATGTGACT
ATCACTGATGCTCCAGGACACAGAGACTTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACTGTGCTGTC
CCGATTGTTGCTGCTGGTGTGGTGAAATTTGAAGCTGGTATCTCTAAGAAATGGGCAGACCCGAGAGCATGCCCTT
CTGGCTTACACACTGGGTGTGAAACAACATAATTGTTGGTGTAAACAAAATGGATTCCACTGAGCCACCCCTACAGC
CAGAAGAGATATGAGGAAATTTGTTAAGGAAGTCAGCACTTACATTAAGAAAATTTGGCTACAACCCCGACACAGTA
GCATTTGTGCCAATTTCTGGTTGGAAATGGTAACAACATGCTGGAGCCAAAGTGCTAACATGCCTTGGTTCAAGGGA
TGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAAACCATGCTGCTTGAGGCTCTGGACTGCATCCTACCACCA
ACTCGTCCAACGTGACAAGCCCTTGCGCCTGCCCTCTCCAGGATGCTACAAAATTTGGTGGTATTGGTAGTGTTCCT
GTTGGCCGAGTGGAGACTGGTATTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAGTCAACGTTACAAACAGAA
GTTTGGGGCTTCCATGTCAAGAATGTGTCTGTCAAGGATGTTGCTCGTGGCAACGTTGCTGGTGACAGCAAAAAT
GACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAATAA

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FIGURE 1555

TATAAATGCAGTAGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGACTGCTGAGATGGGAAAGGGCTCT
TTCAAGTATGGCTGGGCTCTGGATAAACTGAAAGCTGAGCGTGAACGIGGTATCACCATTGATATCTCCTTGTGG
AAATTTGAGACCAAGCAAGTACTATGTGACTATCACTGATGCTCCAGGACACAGAGACTTCATCAAAAAACATGATT
ACAGGGACATCTCAGGCTGACTGTGCTGTCCGATTGTTGCTGCTGGTGTTGGTGAATTTGAAGCTGGTATCTCT
AAGAATGGGCAGACCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAATAATTGTTGGTGTAAAC
AAAAATGGATTCCACTGAGCCACCCACAGCCAGAGAGATATGAGGAAATTGTTAAGGAAGTCAGCACTTACATT
AAGAAAATTGGCTACAACCCCGACACAGTAGCATTGTGCCAATTTCTGGTTGGAATGTTAAACAACATGCTGGAG
CCAAGTGCTAACATGCCCTTGGTTCAAGGGATGGAAGTCACCCGTAAGGATGGCAATGCCAGTGGAAACCATGCTG
CTTGAGGGCTCCAGTCAACGTTACAACAGAAGTAAAAATCTGTGCAAAATGCACCATGAAGCTTTGGGTGAAGCTCT
TCCTGGGGACAGTGTGGGCTTCCATGTCAAGAATGTGTCTGTCAAGGATGTTCTGTCGTGGCAACGTTGCTGGTGA
CAGCAAAAATGACCCACCAATGGAAGCAGCTGGCTTCACTGCTCAGG

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FIGURE 1556

GTCGGCGTGTGAGTGGCTCTTCCTGGCTGCTGAGGCGGGTTAAGGTCTGAGGGTCTTGTGGGGCCACGGCGCTG
ATCACCAGGTGTTTGGCTTGGTCGGTTCTTATTTCTCGCTGGCAATGGCGACGTACACCTGCATAACTTGCCGG
GTGGCGTTCCGCGACGCGGACATGCAGCGGGCCCACTATAAGACGGACTGGCACCGCTACAACCTCGCGCGGAAG
GTGGCCAGCATGGCCCCAGTGACCGCCGAGGGCTTCCAGGAGCGAGTGCAGGGCGCAGCGGGCCGTGCGGGAGGAG
GAGAGCAAGGGCTCGGCCACCTACTGCACCGTTTGCAGTAAGAAGTTTGCTCTTTCAACGCCACGAGAACCAC
CTCAAGTCCC GGCGTCACGTTGAGCTGGAGAAGAAGGCCGTGCAGGCAAGTGAATCGGAAAGTGGAGATGATGAAT
GAAAAGAACTTGGAGAAAGGACTGGCGTGGACAGTGTGGACAAGGATGCCATGAACGCGGCCATCCAGCAGGGCC
ATCAAGGCCCAGCCGTCCATGTCTCCCAAGAAGGCCGCCCCAGCGCCTGCAAAGGAGGCCAGGAATGTCGTGGCC
GTGGTACTGTTGGCGCTGGGACCCAGACCAGCCGAGACCCGAGTGAGAAACCAACCCCGCTCCAGTGGTTGAACAG
CAGGCGAAGAAGTTGGCAAGCAGCAGGAGGAGGACAGCGAGGAGGAGGAAGAGGACCTGGATGGAGACGATTGG
GAAAGATATTGATTCTGATGAAGAATTGGAATGTGAGGATACCTGAAGCAATGGACGATGTGGTGGAGCAGGATGCA
GAGGAGGAAAGGGCTGAGGAAGGCCACCCCTTGGTGCCATCCCTATCACGGACTGCTTATTTGTTCCTCATCAT
TCCAGCTCGCTGATGAAGAATGTGGCTACATGACCAAAGACCACAGTTTCTTATTCCTGATATAGAATATCTT
TCAGATATTAAAGGACTGATTAATACTTGGGAGAGAAAGTTGGTGTGGCAAGATTGCTTGTGGTGCACACGAG
AAAGGGAAGTCCTTCTACTCCACAGAAGCTGTACAGGCACATATGAATGACAAAAGCCACTGTAAGCTCTTCACA
GATGGCGATGCTGCTTTGGAATTTGCAGACTTCTATGATTTTAGGAGTAGCTATCCAGATCACAAAGGAAGGGGAG
GACCCCAATAAAGCTGAGGAGTTGCCCTCAGAAAAGAACTTGGAAATATGATGATGAAACCATGGAATTGATTCTG
CCTTCTGGTGCCAGAGTGGGTATCGCTCCTTGATGAGATACTACAAACAGCGATTGGCTTGTCAAGAGCTGTG
GCAGTTGCCAAAAATCGGAAGGCCGTGGGCCGAGTACTTCAGCAGTACAGAGCCCTGGGATGGACTGGCAGCACA
GGAGCGGCTCTTATGCGAGAGCGAGACATGCAGTATGTCCAAAGGATGAATCAAAATGGATGCTGAAGACAGGA
ATGAAGAACAATGCCACCAAGCAGATGCATTTCCGGTCCAAAGTGAGATTCTGAGAGTCTGCTGGGATTGAGCAA
TCATCTCTGCCCAAGTTTCTCTCTTGCCTGAGGACCAGTGAAGACAGATCATAGGAGAGACCCCTTTTGTCTG
TACTTCATTCTGTTCTGACCTAATAATAAAGTTAGAACCAT

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FIGURE 1557

GAACTCCAAGATGGGAGGCAAGCTCAGCAAGAAGAAGAAGGGCTACAATGTGAACGACGAGAAAGCCAAAGGAGAA
AGACAAGAAGGCCGAGGGCGCGGACGGAAGAGGAGGGGACCCCGAAGGAGAGTGAGCCCCAGGCGGCCGAGAG
GCCCGCCGAGGCCAAGGAGGGCAAGGAGAAGCCCGACAGGACGCCGAGGGCAAGGCCGAGGAGAAGGAGGGCGA
GAAGGACGCGCGGCTGCCAAGGAGGAGGCCCGAAGGCGGAGCCCCGAGAAGACGGAGGGCGCGGAGAGGCCAA
GGCTGAGCCCCGAAGGCGGCCGAGCAGGAGCAGGCGGCCCGCGGCCCGCTGCGGGCGGCGAGGCCCCAAAGC
TGCTGAGGCCGCCGCGGCCCGCGGCCGAGAGCGCGGCCCTGCGCGCGGGGAGGAGCCAGCAAGGAGGAAGGGGA
ACCCAAAAGACTGAGGCGCCCGCAGCTCCTGCCGCCAGGAGACAAAAGTGACGGGGCCCCAGCTTCAGACTC
AAAACCCGGCAGCTCGGAGGCTGCCCTCTTCCAAGGAGACCCCGCAGGCCACGGAAGCGCTAGTTCCACACC
CAAGGCCCAGGGCCCCGAGCCTCTGCAGAAGAGCCCAGGCCGTGGAGGCCCGGCAGCTAATTCGACCAAAAC
CGTAACCGTGAAAGAGTGAACAAGACAGCCCTATAGGAAAAACAATACCCTTAAACAATCTCCTCTCTCTCT
CTCTCTCTCTCTATCT
ACTAAGTTGTTTCAAATTGGAAGTAATGATATGATATGCCCAAGGAAAAATACAGGATGTTGTGCCATCAAGGGA
GGGAGGGGGTGGGAGAATCCAAATAGTATTTTGTGGGGAATATCTAATATACCTTCAGTCAACTTTACCAAGA
AGTCCTGGATTCCAGATCCGCGCTCTGAAAGTGCAGTACATCGTTTGACCTGAAACTGCCGCCACATGCACTC
CTCCACCGCTGAGAGTTGAATAGCTTTTCTCTGCAATGGGAGTTGGGAGTGATGCGTTTGATTCTGCCACAGG
GCCTGTGCCAAGGCAATCAGATCTTTATGAGAGCAGTATTTTCTGTGTTTTCTTTTAAITTTACAGCCTTTCTTA
TTTTGATATTTTTTAAITTTGTGGATGAATGCCAGCTTTCAGACAGAGCCCACTTAGCTTGTCCACATGGATCT
CAATGCCAATCCCTTCTCTCTCTCCAGATATTTTGGGAGTGACAAACATTTCTCTACCTTACTTAGCCTAC
CTAGATTCTCATGACGAGTTAATGCATGTCGCGGTTGGGTGCACCTGTAGTCTGTGTTTATTTGGTCAGTGGAAA
TG

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FIGURE 1558

MGGKLSKKKKGYNVNDKAKKDKKAEGAATEEEGTPKESEPQAAAEPAEAKEGKEKPDQDAEGKAEKEGKDA
AAAKEEAPKAPEKTEGAAEAKAEPKAPPEQEQAAPGPAAGGEAPKAAEAAAAPAESAAPAAGEEPSKEEGEPKK
TEAPAAPAAQETKSDGAPASDSKPGSSEAPSSKETPAATEAPSSTPKAQGPAAAEKPVVEAPAAANSQTVTV
KE

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FIGURE 1559

CGAGAGTCGTCGGGGTTTCCTGCTTCAACAGTGCTTGGACAGAACCTGGCGCTCGTCCCCACACGGCCGGCTG
CCCATAGCCAGCCCTCCGTACCTCCTCACCCGCGAGCCGCTCTCCTTAGTCGCCGCATGACGACCGCTCCAC
CTCACAGGTGCGCCAGGACTACCACCAGGACTAAAGGCCGCCATCAACCGCCAGATCAACCTGGAGCTCTACGCC
TCCTGCGITTAACGTCCATGTCTTACTACTTTGACCGCGATGATGTGGCTTTGAAGAACTTTGCCAAATACTTT
CTTCACCAATCTCATGAGGAGAGGGAACATGCTGAGAACTGATGAAGCTGCAGAACCAAGGAGGTGGCCGAATC
TTCTTCAGGATATCAAGAAACCGGACTGTGATGACTGGGAGAGCGGGCTGAATGCGATGGAGTGTGCATTACAT
TTGGAAAAAATGTGAATCAGTCACTACTGGAACTGCACAACTGGCCACTGACAAAAATGACCCCCATTGTGT
GACTTCATTGAGACACATTACCTGAATGAGCAGGTCAAAGCCATCAAAGAAATTGGGTGACCACATGACCACTTG
TGCAAGATGGGAGACCCGAATCTAGCTTGGCGGAATATCTCTTTGACCAGCACCCCTGGGAGACAGTGATAAT
GAAAGCTAAGCCTCAGGCTAATTTCCCCATAGCCGTGGGTGACTTCCCTGGTCACCAAGG

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FIGURE 1560

MSYYFDRDDVALKNFAKYFLHQSHEEREHAEKLMLQNGGGRIFLQDIKKPCDDWESGLNAMECALHLEKNVN
QSLLELHKLATDRNDPHLCDFIETHYLNEQVKAIKELGDHMTNLCKMGAPESSLAEYLFQHTLGDSDNES

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FIGURE 1561

ATGCCAAAACGATCAGTGTGCGTGTGACCAACCATGGACGCAGAGCTGGAGTTTACCATCCAGCCCAACACCACC
GGGAAGCAGCTATTTGACCAAGAGTGACTGCCAGGAAGTGCGGAAGGAAAGCCCCCTGCTCTTTAAGTTCAGT
GCCAAGTTCTACCTGAGGATGTGTCCGACCGAGGAATTGATTCAGGACCACTCAGCGCTGTGTTCCCTTGTGA
ATGAAAGAGGGCATTCTCAGTATGATATTTACTGCCGCCCTGAGACTGCTGTGCTGCTGGCCCTCCCATGCTGTC
CAGTCTAAGTATGGGAACCTCAGTAAGGAGGTGCATAAGTCTGGCTACCTGGCCGGAGACGAGTGTGCTCCACAG
AGAGTCCITGGAAACAGCACAACTCAGCAAGGACCAGTGGGAGGAGCGGATCCAGGTGTGGCATGAGGAACCCGT
GGCATGCTCAGGGAGGATGCTGTCTCGGAGTATCTGAAGATTGCTCAAGATCTGGAGATGTATGGTGTAACCTAC
TTCAGCATCAAGAAAAAGAAAGGCTCAGAGCTGTGGCTGGGGGTGGATGCACTGGGCTCAACATCTATGAGCAG
CATGACAGACTAACTCCCAAGATAGGCTTCCCTGGAGTGAATCAGGAGCAITTTCTTCAATGATAAGAACTTT
GTCATCAAGCCCATTGACAAAAGAGCCCCGGACTTTGTCTTCTATGCTCCCTGGCTGCAGATTAACAAGCGGATC
TTGGCCTTGTGCATGGGGAACCGTGAACATAACATGCGCCGTCGCAAGCCTGACACCATTGAGGTGCAGCAGATG
AAGGCACGGGCCCGGGAGGAGAAGCACCAGAAGCAGATGGAGCGTGCTATGCTGGAAATGAGAAGAACCGTGAA
ATGGCAGAAAAGCAGAAAGAGAAGATTGAACGGGAGAAGGAGCTGATGGGAGGCTGAAGCAGATCAGGGAACAG
ACTAAGAAGGCTCAGCAAGAACTGGAAGAACAGACCCGTAGGGCTCTGGAACITGGGAAGGAACGGAAGCATGCC
CAGAGCGAGGCTGAAAGCTGGCCAAGGAGCTTCAAGAAGCTGAAGAGGCCAAGGAAAAAGAGAGATGAGGCT
ATGGAGTGGCAGCAGAAAGGCCAGATGGTACAGGAAGACTTGGAGAAGACCCGTGTGAGCTGAAGACTGCCATG
AGTACATCTCATGTGGCAGAGCCTGCTGAGAATGAGCAGGATGAGCAGGATGAGAATGGGGCAGAGGCTAGTGT
GACCTACGGGCTGATGCTATGGCCAAGGACCGCAGTGAGGAGGAATGTACCACTGAGGCAGAGAAGATGAGCGT
GTGAGAAGCACTGAAGCCCTCACTTCGGAGCTGGCCAGTGCCCGAGATGAGTCCAAGAAGACTGCCAATGAC
ATGATCCATGCTGAGAACATGTGA

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FIGURE 1562

ATGCCGCCCTCGCCTGCGTCCTGCGGCCGTCCCGAGGTGTCACGCTGTCAACAACACAAAGTCGTAGTTGACGTC
GACCATGAGCACTTAGCAGGAGGGCAGCACAGGGACTTGTGCCCGCGGGGTCCAGCTCCTGCACCTTCAGCTG
CCACTCCATCCTCTGCACAGCGTTCAAGGCCGAGCCTCGTGCTGCTGCCGCATGAGGAGGAAGAACTAGATGAA
CTTATGAGTGAAGAAGCCTATGAGAAATACATAAAATCTATTGAGGAGTGA

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FIGURE 1563

MPPSPASCGRPEVSRQCQHKVVVDVDHEHLAGGHAQGLVPGGVQLLHLQLPLHPLHSVQGRSLVLLFHEEEELDE
LMSEAEYKYIKSIEE

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FIGURE 1564

GCCGAGCGATGGGCATCTCTCGGGACAACTGGCACCAAGCGCCGCAAAACCGGGGGCAAGAGAAAGCCCTACCA
AGAAGCGGAAGTATGAGTTGGAGCGCCAGCTGCCAACACCAAGATTGGCCCCCGCGCATCCACACAGTCCGTG
TGCAGGGGAATGTTGTACTCGTAAACAAGGATCATCGATGTTGTCTACAATGCATCTAATAATGAGCTGGTTCGT
ACCAAGACCCCTGGTGAAGAATTGCATCGTGTCTCATCGACAGCACACCGTGCCGACAGTGGTAAGATGTCCCCTA
CGTGCTGCCCCTGGGCCGCAAGAAGGGAGCCAAAGCTGACTCCTGAGGAAGAAGAGATTTTAAACAAAAACGATT
TAAACAAATTCAGAAGAAATATGATGAAAGGAAAAAGAAATGCCAAATCAGCAGTCTCCTGGAAGAGCAGITCCA
GCAGGGCAAGCTTCTTGCAATGCATCGCTTCAAGGCCGGGACAGTGTGGCCGAGCAGATGGCTATGTGCTAGAGGG
CAAAGGGTTGGAGTTCTATCTTAGGAAAATCAAGGCCCGGAAAGGCAATAAATCCTTGTGTTTGTCTTACCCAT
GTAATAAAGGTGTTTATTGTTTTGTTCC

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FIGURE 1565

CCGAGGCCAAGTCCC GGGCGCTAGCCACCTCCC ACCCGCCTCTTGGCTCCTCTCCTCTAGGCCGTGCGTTTCGG
GTTCTCTCATCGCTTCGTCGTCGCCAATGTTTGAGGAGAAAGGCCAGCAGTCCTTCAGGGAAGATGGGAGGCGAG
GAGAAGCCGATTTGGTGCTGGTGAAGAGAAACAAAGGAGGCAAAAAGAAAGAACAAAGAGGATCTGGAGAT
GGAGGTCGAGCTGAGTTGAATCCTTGGCCTGAATATATTTACACACGTCCTTGAGATGTATAATATACTAAAGCA
GAACATGATTCCTTCGCGAGAAAGGCAGAAAAAGATAGCAAGCCAATTAAAGTCACCTTTGCCGTATGGTAAA
CAGGTTGATGCGGAATCTTGGAAACTACCCATATCAAAATGCCCTGTGGAATTAGTCAAGGCCCTGGCCGACAAC
ACCGTTATTGCTAAAGTAAATTAATGTTGTGTGGGACCTGGACCGCCCTCTGGAAGAAGATTGTACCTTGGAGCTT
CTCAAGTTTGAGGATGAGGAAGCTCAGGCAGTGTATTGGCACTCTAGTGCTCACATAATGGGTGAAGCCATGGAA
AGAGTCTATGGTGGATGTTTATGCTACGGTCCGCCAATAGAAAATGGATTCTATTATGACATGTACCTCGAAGAA
GGGGGTGTGTCTAGCAATGATTTCTCTCTCTGGAGGCTTTGTGTGAAGAAATCATTAAAGAAAACAAAGCTTTT
GAAAGACTGGAAGTTAAGAAAGAACTTTACTGGCAATGTTTAAGTACAACAAGTTCAAATGCCGGATATTGAAT
GAAAGGTTGAATACTCCAACCTACCAGAGTCTATAGATGTGGCCCTTTGATAGATCTCTGCCGGGTCCTCATGTT
AGACACACGGGCCAAAATTAAGGCTTAAAAATACACAAAATTCCTCCACGTACTGGGAAGGCAAGCAGATATG
GAGACTCTCCAGAGAATTTATGGCATTTTCATTCAGATCCTAAATGTTGAAGAGTGGGAGAAGTCCAAGAG
GAAGCTAAAAACCGAGATCATAGGAAAATGGCAGGGACCAAGAACATATATTTCTTCATGAACCTCAGCCCTGGA
AGTTGCTTTTTTCTGCCAAAAGGAGCCTACATTTATAATGCATCTATTGAATTCATTAGGAGCGAATATAGGAAA
AGAGGATTCAGGAGGTAGTCAACCCAAACATCTTCAACAGCCGACTCTGGATGACCTCGGGCACTGGCAGCAC
TGCCAGGAGAACTGTTCTCCCTTTGAGGTGGGAAGGAGCTGTTTGCCCTGAAACCCATGAACCTGCCAGGCAC
TGCTTATGTTTGATCATCGGCCAAGGTCCTGGCGAGAACTGCTCTGCGGCTAGCTGATTTTGGGTACTTCAT
AGGAACGAGCTGTCTGGAGCATCACAGGACTCACCCGGGTACGAAGATTCCAACAGGATGATGCTCACATATTC
TGTGCCATGGAGCAGATTGAAGATGAAATAAAAGTTGTTTGGATTTTCTACGTACGGTATATAGCGTATTTGGA
TTTTCTTTTAACTAAACCTTTCTACTCGCCCGGAAAAATTCCTGGAGATATCGAAGTATGGGATCAAGCTGAG
AAACAACCTTGAAAACAGTCTGAATGAATTTGGTGAAGAGTGGGAGTTAAACTCTGGAGATGGAGCTTCTATGGC
CCAAAGATTGACATACAGATTAAAGATGCGATTGGCGGTACCACCACTGTGCAACCATCCAGCTGGATTCCAG
TTGCCCATCAGATTTAATCTTACTTATGTAAAGCCATGATGCTGATGATAAGAAAAGGCCAGTATTGTCATCGA
GCCATCTTGGGATCAGTGGAAAGATGATTGCTATCCTCACAGAAAACATGGGGGCAATGGCCCTTTTGGCTG
TCCCTCTGCCAGGTAAATGGTATGTTCCAGTGGGACCAACCTGTGATGAATATGCCCAAAAGGTACGACAACAAATC
CAGGATGCCAAATTCATGGCAGACATTGATCTGGATCCAGGCTGTACATTGAATAAAAGATTGGAATGACAG
TTAGCACGATATACTTCATTTTATGTTGGTGAAAGAGAAATCAGTGGCACTGTTAATATCCGCAAGA
GACAATAAGGTTCCACGGGGAACGCACCATTTCTGAACTATCGAGCGGCTACAGCAGCTCAAGAGTTCCGCGAG
AAACAGGCAAGAAGAAATTTAAATGAAAAAATACCAGATTGGCTCCATGGAAAAGGAGGAACAGCGCTTCCG
TAAAAATGACTTTGTACTCTGAAAACGTCAAATTTATATGAACTTGAGGAGATTGGCAAGCTGGAATAGGTCA
ACCTGCAGGCGTAACTATTTTGACCTAGTCAGTTTAAACAAATGTGCATTTGAAGGAGTTAATTAAGAGAG
CCAATAAATGATTTTACTCATTGATCTGAGTACTGGAAGTGAACATGAGGAATGCTTTAGTGTAAATGTGG
GAGAACCTTTTTGTAAATTTAATGCAATTGAAAAGTTTTCAAATTCAAATGAATACTAGAATTGGATTATGG
TGTA

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FIGURE 1566

MFEEKASSPSGKMGEEKPIGAGEEKQKEGGKKKKEGSGDGGRAELNPWPEYIYTRLEMYNILKAEHDSILA
AEKDSKPIKVILPDGKQVDAESWKTTPYQIACGISQGLADNTVIAKVNNVVWDLDRPLEEDCTLELLKFEDEEAQ
AVYWHSSAHIMGEAMERVYGGCLCYGPPPIENGFYYDMYLEEGGVSSNDFSLEALCKKIIKEKQAFERLEVKKET
LLAMFKYNKFKCRILNEKVNTPTTTTVYRCGPLIDLRCRPHVRHTGKIKALKIHKNSSTYWEGKADMETLQRIYGI
SFPDPKMLKEWEKQEEAKNRDHRKIGRQELYYFFHELSPGSCFPLPKGAYIYNALIEFIRSEYRKRGFQEVVTP
NIFNSRLWMTSGHWQHYSENMFSEVEKELFALKPMNCPGHCLMFDHRPRSWRELPLRLADFGVLHRNELSGALT
GLTRVRRFQDDAHIFCAMEQIEDEIKGCLDFLRTVYSVFGFSFKLNLSTRPEKFLGDI EVWDQAEKQLENSLNE
FGEKWELNSGDGAFYGPKIDIQIKDAIGRYHQCATIQLDFQLPIRFNLTYVSHDGGDKKRPVIVHRAILGSVERM
IAILTENYGGKWPFWLSRPQVMVVPVGPCTDEYAQKVRQQFHDAKFMADIDLDPGCTLNKKIRNAQLAQYNFILV
VGEKEKISGTVNIRTRDNKVHGERTISETTIERLQQLKEFRSKQAEDEF

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FIGURE 1567

GAGCATGGATGATTGGCCAGAAAAGAAGAAGTTTGCAGATGTATTGCAAAGAAGACGAAGGCAGAGTGGTG
TCAAAATCTTTGACGGCAGAGATGCCTGTGTGACTCCGGTTCTGACTTTTGAGGAGGTTGTTTCATCATGATCACAA
CAAGGAACGGGGCTCGTTTATCACCAGTGAGGAGCAGGACGTGAGCCCCGCCCTGCACCTCTGCTGTTAAACAC
CCCAGCCATCCCTTCTTTCAAAGGGATCCTTTCATAGGAGAACACACTGAGGAGATACTTGAAGAATTGGATT
CAGCCGCGAAGAGATTATCAGCTTAACTCAGATAAAATCATTGAAAGTAATAAGGCTGGTAGCAAAGTTCGGAT
CTTATACCCAACACACAGCAACATCCAGAAATAAGATCTCAGGACCCCCAGCAAGTCGTTTTGTGCTCCCTTG
GACTGAGTTAAGITTACAAGCCTTCTTATACCTGTCTTTGACAAAGAAGACGGGATTGTCTTTACATAAAACCAG
CCTGCTCCTGGAGCTTCCCTGGACTCAACTTCTAAAGGCATGTGAGGAAGGGGTAGATTCCCAATCTAATCCG
GGTGCCATCAGAGTAGAGGGAGTAGAGAATGGATGTTGGGTAGGCCATCAATAAGGTCCATTCTGCGCAGTATCT
CAACTGCCGTTCAACAATCGCAAGAGGAAGGTGGAGCAGGTTTCTTCATCTTACAGTTGAGAAAACAGAGACTCA
GAAGGGCTTCTTAGTTCGTGTTTCCCTTAGCGCCTCAGTGATTTTTCATGGTGGCTTAGGCCAAAAGAAATATC
TAACCATTCATTTATAAATAATTAGGTCCCAACGAATTAAATATTATGTCTACCAACTTATTAGCTGCTTGA
AAAATATAATACACATAAATAAAAAA

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FIGURE 1568

GGCGCCGGGGATTGGGAGGGCTTCTTGCAAGCTGCTGGGCTGGGGCTAAGGGCTGCTCAGTTTCCTTCAGCGGGG
CACTGGGAAGCGCCATGSCACTGCAGGGCATCTCGGTCTGTGGAGCTGTCCGGCTTGGCCCCGGGGCCGTTCTGTG
CTATGGTCCTGGCTGACTTCGGGGCGGTGTGGTACGCGTGGACCGGCCCGGCTCCGCTACGACGTGAGCCGCT
TGGGCCGGGGCAAGCGCTCGCTAGTGCTGGACCTGAAGCAGCCGCGGGGAGCCGCGTGTGCGGCGTCTGTGCA
AGCGGTGCGATGTGCTGCTGGAGCCCTTCCGCCCGGCTGTATGGAGAACTCCAGCTGGGCCACAGAGATTCTGC
AGCGGGAAAAATCCAAGGCTATTATTATGCCAGGCTGAGTGGATTGGCCAGTCAGGAAGCTTCTGCCGTTAGCTG
GCCACGATACAACTATTGGCTTTGTCAAGTGTCTCTCAAAAATTGGCAGAAAGTGGTGAAGTCCGATATGCC
CGCTGAATCTCCTGGCTGACTTTGCTGGTGGTGGCCTTATGTGTCACTGGGCATTATAATGGCTCTTTTTGACC
GCACACGCACTGGCAAGGTCAGGTCTTGTATGCAAAATATGGTGAAGGACAGCATATTAAAGTCTTTTTCTGT
GGAAAACCTCAGAAATCGAGTCTGTGGGAAGCACCTCGAGGACAGAACTGTGGATGGTGAGGACCTTTCTATA
CGACTTACAGGACAGCAGATGGGGAATTCATGGCTGTTGGAGCAATAGAACCCAGTTCTACGAGCTGCTGATCA
AAGGACTTGGACTAAAGTCTGATGAACCTCCCAATCAGATGAGCATGGATGATTGGCCAGAAATGAAGAAGAGT
TTGCAGATGTATTGCAAGAAGACGAAGGCAGAGTGGTGTCAAATCTTTGACGGCACAGATGCCTGTGTGACTC
CGGTTCTGACTTTTGAGGAGGTTGTTTCATCATGATCACAACAAGGAACGGGGCTCGTTTATCACCAGTGAGGAGC
AGGACGTGAGCCCCCGCCTTGCACCTCTGCTGTTAAACACCCAGCCATCCCTTCTTTCAAAGGGATCCTTTCA
TAGGAGAACACACTGAGGAGATACTTGAAGAATTTGGATTTCAGCCGCAAGAGATTATCAGCTTAACTCAGATA
AAATCAATTGAAAGTAATAAGGTAAGCTAGTCTCTAACTTCCAGGCCACGGCTCAAGTGAATTGAATACTGC
ATTTACAGTGTAGAGTAACACATAAAGCTGTATGATGGAACATGGAGGAACAGATTACAGTGTCTACCACT
CTAATCAAGAAAAGAAATACAGACTCTGATTCTACAGTGATGATTGAATCTAAAAATGGTTATCATTAGGGCTT
TTGATTATATAAACTTTGGGTACTTATACTAAATATGGTAGTTATTCTGCCTTCCAGTTTGTCTGATATATTG
TTGATATTAAGATTCTTGACTTATATTTGAATGGGTTCTAGTGAAAAAGGAATGATATATTCTTGAAGACATCG
ATATACATTATTTACACTCTTGATTCTACAATGTAGAAAATGAGGAAATGCCACAAATTGTATGGTGATAAAAG
TCACGTGAACAGAGTGATTGGTTGCATCCAGGCCCTTTTGCTTGGTGTTTCATGATCTCCCTCTAAGCACATTC
AAACTTTAGCAACAGTTATCACACTTGTGTAATTTGCAAGAAAAAGTTTCACTGTATTGAATCAGAATGCCCTCA
ACTGAAAAAAACATATCCAAAATAATGAGGAAATGTGTGGCTCACTACGTAGAGTCCAGAGGGACAGTCAGTTT
TAGGGTTGCGCTGTATCCAGTAACCTCGGGGCTGTTTCCCGTGGGTCTCTGGGCTGTGAGCTTTCCCTTTCTCCAT
GTGTTTGATTCTCTCAGGCTGGTAGCAAGTTCTGGATCTTATACCAACACACAGCAACATCCAGAAATAAG
ATCTCAGGACCCCC

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FIGURE 1569

MALQGISVVELSGLAPGPF CAMVLADFGARVVRVDRPGSRYPDVSRLGRGKRSVLDLKQPRGA AVLRLCKRSDV
LLEPFRRGVMEKLQLGP EILQRENPR LIYARLSGFGQSGSFCRLAGHDINYLALSGVLSKIGRSGENFYAPLNLL
ADFAGGGLMCALGIIMALFDRTRTGKGQVIDANMVEGTAYLSSFLWKTQKSSLWEAPRGQNMLDGGAPFYTTYRT
ADGEFMAVGAI EPQFYELLIKGLGLKSDLPNQMSMDWPEMKKKFADVFAKKTAEWCQIFDGTDACVTPVLT
EEVVHHDHNKERGSFITSEEQDVSPRPAPLLLNTPAIPSFKRDPFIGEHTEEILEEFGFSREEIYQLNSDKIIES
NKVKASL

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FIGURE 1570

TCTTTCTGGTCTCGGCCGCAGAAAGCGAGATGACGAAGGGAACGTCATCGTTTGGAAAGCGTCGCAATAAGACGCA
CACGTTGTGCCGCCGCTGTGGCTCTAAGGCCTACCACTTCAGAAGTCGACCTGTGGCAAATGTGGCTACCTTGC
CAAGCGCAAGAGAAAGTATAACTGGAGTGCCAAGGCTAAAAGACGAAATACCAACCGGAACGTGGTGAATGAGGCA
CCTAAAAATTGTATACCGCAGATTACGGCATGGATTCCGTGAAGGAACAACACCTAAACCCAAGAGGGCAGCTGT
TGCAGCATCCAGTTTCATCTTAAAGAAATGTCAACGATTAGTCATGCAATAAATGTTCTGGTTTAAAAAATAC

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FIGURE 1571

MTKGTSSFGKRRNKTHILCRRCGSKAYHLQKSTCGKCGYPAKRKRKYNWSAKAKRRNTTGTGRMRHLKIVYRRFR
HGFREGITPKPKRAAVAASSS

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FIGURE 1572

GTGTCGTGGGAGGTTATGTTTATTGAGACTTCTCCATCGGGATCGCCTGGTGTCCACCAAGTGCCACTGGTAC
 TGAGGTTTGTGCTGCTTCTTGGCCATGCTAACGAAGTAGAAACAAAGTGCAACCAATGGTCAGCCCGACCAAC
 AGCGCCGACCAAAAGCACCCTCAAAGAAGGAAAAAAGAAAGGCCCTGAAGAGACCATGAATATCTCTTAGCAA
 GGTTCAAAGCGCATGGTGTAAATATAAGGCCAAGCTGATTGGCATTGATGATGTGCCAGATGCAAGAGGGGATA
 AAATGAGCCAAGACTCTATGATGAAACTAAAGGGAATGGCGGACAGCTGGTGGCTCTCAGGGAACAACAAACAAA
 GGATCTGGGTCAACATTTCCCTTTCTGGGATAAAAAATAATTGATGAGAAAACTGGGTAAATAGAGCATGAACATC
 CAGTAAATAAGATTTCTTTCATTGCCCGTGATGTGACAGACAACCGGGCAATTGGTTACGTGTGTGGAGGAGAAG
 GCCAGCATCAGTTTTTTGCCATAAAACCGGGCAACAGGCTGAACCATTAGTTGTTGATCTTAAAGACCTTTTTTC
 AAGTTATCTATAATGTAAAGAAAAAGGAAGAAGAAAAAGATAAGGAAGCCAGCAAGACAGTTGAGAAATG
 GGAGTGAGGCCCTTAATGATTCTAGATGACCAAACTAACAACTGAAATCGGGTGTGACCATGGATTGTTTGGT
 GGGACATGCTACACCTCCTGACCTAAATAGTCCAACAGAAAGCAAGATATCCTGTAGTGGATCTAAACTCTG
 AAATCGACACCAATCAGAATTTCTTAAAGAAAAATCCATTCTTAAACAAACGGCATCACCCTCTGTTCTCTCTCTC
 GACCAACGCCCTCAGGCATCCTTCTTGCCGCTGAAATGGCTTTCTGCCAATCTCAACTCTTTCCCAACCCCTAATC
 CTGATCCTTTCCGTGACGATCCTTTACACAGCCAGACCAATCGACACCTTCTCTGTTGATTCTCTCAAACTCTC
 CAGATCAGAGAAAGAGAATTTCGATAGCTCGTCTACTCCGCTGAGTAAATGGGCCCCGTAATGGTGAATGTTGACT
 ACTTTGGTCAGCAATTTGACCAAGTCTCTAACCGGACTGGCAACAGGAAGCTCAGCAGGCCGATGGCCCTTTT
 CAAGTTCTGCAAAACCGACCCAGCATGAGAAGCTCAAATGGGGTATCTGAAGAGAGAACAGAACGGCTTCTGTGCA
 AATCCTCCGCAACCTTTTGTGGGAAGCCCTCCCAAAGGACTGTCCATACAGAATGGGCTAAAGACAGCTTGG
 AAAGCTCTGTCCAGTCTCTACACACATGACTCCATAGCCATTATCCCACTCCACAAAGTACCAAAACCGAGAAGAG
 GCAGAAGGAGTGCTAAAGTCTTCAGCCAAATGACTTGCTTGCATCAGACATCTTTGCTCCTCCCGCTCTCAGAACCTT
 CAGGCCAGCGCTCACCACAGGACAACCTACAGCCCTCGAGCCCAACCCCTCTGGATCTTTCAAACAAGACTTCTC
 CTGCCCCAGTGGGGCCCCCTGGTGGGCTAGGTAGGTGTAACGTGCACACTCCCTCAGGCAGGACCATGGAAACACA
 GCATCTTTGGTCTTCAATCAGTCCCCCTTCAATGGCTCCGGGAGCCATGATGGTGGTCAACCTTCAGGTTTATG
 CAGCCCGCTAATTTTTGGTACAAGTCCAGCTGTTTTCAGGTTGGAACCGACCTTGACCCCTTTCAGCCTCAACTCCC
 CCTCCAGTGCTTGTCTGGGGCCCCCTTCTGCATCTGTGGCACCCAATGCTTGGTCAACAACAGGCCCTTTGGGG
 AATCCTTTTTCAGAGCAATAATTTTCCAGCTCCTGCTGTGTCACACTCAGCCCCCATCCATGCATCCTCTCTCTG
 GTCACTCCTCTCAGCCACCTCCCAAGAGCTGGCCCTCCCAAGGACATCTCCAGTGATGCCCTTCACTGCCCTTAGAC
 CCACTTGGGGATAAAGAGATCAAGGATGTGAAAGAAATGTTTAAAGATTTCCAACTCGCGGAGCCACCTGCTGTG
 CCGCGCGGAAGGAGCAGACATCTTCTTGGGACTTTGAGTGCCCTTTCAGCTATTTCACAGCAAGGTTGGC
 ATTCTCAGAGAGATTCAGACACCATGATGACTTTGATGCTAATCAACTATTGAACAGATCAATGAACCAACCAAG
 CCAGCTCCGACAGAAATTTCCCTCGCAGTTACCAATCTACTGACAATGCATTGAGAACCCTTTCTTAAAGAT
 TCTTTTGGTTCATACAAGCCCTCTGTGGCTTCTTCAACCTGTATCTTCTGAGATGTATAGGGATCCATTTGGA
 AATCCTTTTGCTTAATTTCTGAACCTGGCTCGACAGCATCCAGAGGAATAAAAAGGTTGGCCTTAGTAGTCAAA
 AACAAAGCTGATAGCCAGACAGCTTCTGATTTCTGCCCTTGTTCAGCTTATATCTGTTGGCTTATTT
 CTCATTGCCCTTCTACTTGTAAATAGCTTTTCACTTCTGTCTAGGTTAAAGCTAAACTGAATCTATGGCTTTA
 ATATAAATTAAGATCTTAACTCTAGCTTAAAGTGAAGTACAGTAGTTTCCCTACTGAACCTGCCCTT
 TGTGTCCTTGGAACTTCTAGAACACCTGCCCTTCACTCCCTCTGGTTGGGAGATGCAGCCACCATCCTCTTCA
 TCATACTGTTTGAATAAATTTTCAAACTCTTATTTGTCAGAGTTGTTTGGGGGTTCTGTTTCAGAGCATAAAC
 CTAAGGTTATAGTAGAACAAGGCACCTTCTTAAAGAAATCTGTCCAGACCATCAGTTACAGAGAATTTCTA
 AAGTAAATTAAGCAACTACAACCTTCTCTTACAGACCTTTGGAATCTAACCACTTAAGGACCTTTTAAAGAGA
 TAGCTTCTCTTCTTCTGAAGATCAATTTCTCCCAAGGCCAAGATTGCTTTTCTCCCATTTCTTGTAGCTAT
 TGCAAATGAGGGAAGAACATTTATCTATCTCTCCCTTTTTTCTGATCTTTTTTTCAGTCAATTTTGGCTCC
 TGGGTTCAAGTAGTATTAACCCCTTTCACAAGCAACAGACTCTCACAGGGC

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FIGURE 1573

TAGGATGGAAAGGCAGATGTAAGTCCCTCATGCGGAAATATAACACGGGGGGCAACCCGACAGAGGATGTCTCA
GTCAATAGCCGACCCCTTCAGAGTCACAGGGCCAACTCATCTTCAGGAATACAAGCAAGAAAGAACTATTTC AAC
AACCAAGGAAATGCCAGCCCTCTGCAGGACCCAGCAATGTACCTAAGTTTGGGTCCCAAAGCCACCTGTGGCA
GTCAAACCTTCTTCTGAGGAAAAGCCTGACAAGGAACCCAGCCCCGTTTCTAAAGCCCACTGGAGCAGGCCAA
AGATTGCGAACCACGAGCCAGCTTGACCACCAGAGACCCGAGGCGAAAGTGGGATTTCTGAAACCTGTAGGCCCC
AAGCCCATCAACTTGCCCAAGAAAGATTCCAACCTACATTTCCTTGGCCTCTGGAAACAAGCCATCTCTTCAC
AGTGTAAACCAAGACCATGACTTAAAGCCACTAGGCCCGAAATCTGGGCCTACTCCTCCAACCTCAGAAAATGAA
CAGAAGCAAGCGTTTCCCAAATTGACTGGGTTAAAGGGAAATTTATGTGACGATCACAGATCTTGAACCCAAAG
CCCCCTTCTCCCAAACCCGCTTTTGGCCAGAAGCCGCCCCCTAAGTACCGAGAATCCCATGAAGACGAAAGCCCC
ATGAAGAATGTGTCTTCATCAAAAGGGTCCCCAGCTCCCTTGGGAGTCAGGTCCAAAGCGGCCCTTTAAACCA
GCAAGGGAAGACTCAGAAAAATAAGACCATGCAGGGGAGATTCAAGTTTGCCCTTTCTGGAGTGGTTTGTAAA
CCTGCTGCGAGCAGGGGAGGCCCTAGGTCTCTCCAAAAATGGTGAAGAAAAAAGGAAGATAGGAAGATAGATGCT
GCTAAGAACACCTTCCAGAGCAAAATAAATCAGGAAGAGTTGGCCTCAGGGACTCCTCCTGGCAGGTTCCCTAAG
GCCCTTCTAAGCTGACAGTGGGGGGCCATGGGGCCAAAGTCAGGAAAAGGAAAAGGGAGACAGAATTACGCC
ACCCCGAAACAGAAGCCATTGCCCTCCTTGTTTACCTTGGGTCCACCTCCACCAAAACCAACAGACCACCAAACT
GTTGACTTGACGAATTTCCCAAAAACCTCTTCTGGAACAGTACTAGCAAAAGGCCAGACCTTACTCAACAACT
TCCCTGCCACCACCTCCACCATCCCATCCGGCCAGCCAACACCATTGCGAGCATCTACCCATCAACCAACCA
GTCCAAAGCTTACCTCCCAAAAACATTAACCTCCGTTTGACCTAAAAGCCCTGTCAATGAAGACAATAAGAT
GGTGTACGCACCTCTGATGGTGCTGGAAATCTAGATGAGGAACAAGACAGTGAAGGAGAAACATATGAAGACATA
GAAGCATCCAAAGAAAGAGAGAAGAAAAGGGAAGGAAGAAAGAGGTTAGAGCTGGAGAAAAGGAACAG
AAAGAAAAGAAAAGAAAAGAAAAGAAATAAAGAAGAAATTTAAACTTAACAGGCCCTATTCAAGTCATCCATCTT
GCAAAAGCTTGTGTGATGTCAAAGGAGGAAAGAAATGAAGTGAAGCTTCAAGCAAGGAGAGCAAAATGAAATCATC
CGCATCACAGACAACCCAGAAGGAAAATGGTTGGGCAGAACAGCAAGGGGTTCAATGCGCTATATTTAAACAACCT
GCTGTAGAGATTGACTATGATTCTTTGAAACTGAAAAAGACTCTCTTGGTGCCCTTCAAGACCTATTGAAGAT
GACCAAGAAGTATATGATGATGTTGCAGAGCAGGATGATATTAGCAGCCACAGTCAGAGTGGAAAGTGGAGGGATA
TTCCTCCACCACCAAGATGATGACATTTATGATGGGATTGAAGAGGAAGATGCTGATGATGGTTTCCCTGCTCCT
CCTAAACAAATTGGACATGGGAGATGAAGTTTACGATGATGTGGATACCTCTGATTTCCCTGTTTTCATCAGCAGAG
ATGAGTCAAGGAACATAATTTTGAAAAAGCTAAGACAGAAGAAAAGGACCTTAAGAAGCTAAAAAGCAGGAAAAA
GAAGAAAAAGACTTCAGGAAAAAATTTAAATAATGATGGTGAAATTAGAGTCCTATATTCAACTAAAGTTACAACCT
TCCATAACTTCTAAAAAGTGGGGAACCAAGAGATCTACAGGTAACCACTGGTGAATCTCTAGAAGTTATACAACAC
ACAGATTGACCAAAAAGTTCTCTGCAAGAAATGAAGAGGGAATATGGTTATGCTCTCGGAGTTACCTAGCGGCAC
AATGATGGAGAGATCTATGATGATATTGCTGATGGCTGCATCTATGACAATGACTAGCACTCAACTTTGGTCATT

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FIGURE 1574

MAKYNTGGNPTEDVSVNSRPFRTVGPNSSSGIQARKNLFNNQGNASPPAGPSNVKFGSPKPPVAVKPSSEKPD
KEPKPPFLKPTGAGORFTPASLTTRDPEAKVGF LKPVGPKP INLPKEDSKPTFPWPPGNKPSLHVSVDHDLKP
LGPKSGPTPTSENEQKQAFPKLTGVKGKFMASQDLEPKPLFPKPAFGQKPLSTENSHEDSPMKNVSSSKGS
PAPLGVRSKSGPLKPAREDSKNDHAGEISSLPFGVVLKPAASRGGLGLSKNGEEKKEDRKIDAAKNITFQSKIN
QEELASGTPPARFPKAPSKLTVGGPWGQSQEKEKGDKN SATPKQKPLPPLFTLGPPPPKPNRPPNVDLTKFHKT
SGNSTSKGQTSYSTSLPPPPSHPASQPLPASHPSQPPVP SLPPRNKPPFDLKSPVNEQDQGVTHSDGAGN
LDEEQDSEGETYEDIEASKEREKKREKKRLELEKKEQKEKEKEQEIKKKFKLTGPIQVIHLAKACCDVKGG
KNELSFKQGEQIEIIRITDNPEGKWLGR TARGSYGYIKTTAVEIDYDSLKLLKDSL GAPS RPIEDDQEVYDDVAE
QDDISSHSQSGGGIFPPPPDDDIYDGI EEDDADDGFPAPPKQLDMGDEVYDDVDTSDFPVSSAEMSQGTNFGKA
KTEEKDLKKLKKQEKEKDFRKKFKYDGEIRVLYSTKVITSITSKKWGTRDLQVKPGESLEVIQTDDTKVLCRN
EEGKYGYVLSYLDADNDGEIYDDIADGCIYDND

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[illegible]

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FIGURE 1576

MERSGSPSEVTGSDASGDPQLAVTMGFTGFGKKARTFDLEAMFEQTRRTAVERSRTKLEAREKEEEMNREKELRR
QNEDIEPTSSRSNVVRDCSKSSSRDTSSSESEQSSDSDDELIGPPLPKMVGKPVNFMEEDILGPLPPPLNEEE
EEAEEEEEEEEENPVHKIPDSHEITLKHGKTKTVSALGLDPSGARLVTTGGYDVKFWDGAGMDASFKAFRSLQ
PCECHQIKSLQYNTGDMILVVSGSSQAKVIDRDGFVMECIKGDQYIVDMANTKGHTAMLHTGSWWHPKIKGEFM
TCSNDATVRTWEVENPKKQKSVFKPRTMQGKKVIPTTCTYSRDGNLIIAACQNGSIQIWRNLTVHPKFHYKQAH
DSGTDTS CVTFSYDGNVLASRGDDSLKLWD IRQFNKPLFSASGLPTMFPMTDCCFSPDDKLI VITGTSIQRGCGS
GKLVFFERRTFQRVYEIDITDASVVRC LWHPKLNQIMVGTGNGLAKVYYDPNKSQRGAKLCVVKTQRKAKQAETL
TQDYIITPHALPMFREPRQRSTRKQLEKDRDPLKSHKPEPPVAGPGRGGRVGTGGTSSYIVKNIALDKTDDDS
NPREAILRHAKAAEDSPYWVSPAYSKTQPKTMFAQVESDDEEAKNEPEWKKRKI

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FIGURE 1577

CGGGCTGTAGAGCCTTGCGCGCGCAGTGGGGATGGAACGTTGCTAGGCTTAGCGGGTCTGGCTGCTGGGGGCCCG
AGCAGCACGCTCGGAGCCGCGCGCGCCAAAGCGGGAATCTGGGAGGCGAGCAGCTCTGCAGTTAATGCACGTAT
TTTAAACTCCCAGGCTGCGGACGCTATGCACAGGAAGCACCTCCAGGAGATTCCAGACCTGAGTAGCAACGTTG
CCACCAGCTTCACGTGGGGATGGGATTCCAGCAAGACTTCTGAACTGCTGTGAGGCATGGGGGTCTCCGCCCTGG
AGAAAGAGGAGCCCACAGTGAAGAACATCCCCCAGGAAGCTGCTCTCAAACCTGGGCCACCCGGAGAGCCCCCAC
GGAAACGGCTGAAGAGCAAAAGGAGTGACAAAGACTTTGTGATTGTCCGAGGCCTAAGCTAAATCGAGAGAAT
TTCAGGTGTTTCATGGGACTCCCTTCCGGATGAGCTGCTCTTGGGAATCTTTTCTGTCTGTGCCTCCCTGAGC
TGCTAAAGGTCCTGGTGTGTTGTAAGAGGTGGTATCGCCTAGCGTCTGATGAGTCTCTATGGCAGACCTTAGACC
TCACAGGTAAAAATCTGCACCCGGATGTGACTGGTGGTGTCTGTCTCAAGGGGTGATTGCCTTCCGCTGCCAC
GATCATTTATGGACCAACCATTTGGCTGAACATTTAGCCCTTTTCGTGTACAGCACATGGACCTATCGAACTCAG
TTATAGAAAGTGCCACCCCTCCACGGCATACTGTCTCAGTGTTCCAAAGTTGCAGAACTCTAAGCCTGGAAGGCCTGC
GGCTTTCGGATCCCATTGTCAATACTCTCGCAAAAACTCAAATTTAGTGCAGCTTAACCTTTCTGGGTGTTCTG
GATTCCTGAAATTTGCCCTGCAGACTTTGCTAAGCAGCTGTTCCAGACTGGATGAGCTGAACCTCTCCTGGTGTT
TTGATTTCACTGAAAAGCATGTACAGGTGGCTGTTGCGCATGTGTGAGAGACCATCCACAGCTGAATCTTAGCG
GCTACAGAAAGAATCTCCAGAAATCAGATCTCTACTTTAGTTAGAAGATGCCCAATCTTGTCCATCTAGACT
TAAGTGATAGTGTCATGCTAAAGAATGACTGCTTTCAGGAATTTTCCAGCTCAACTACCTCCAACACCTATCAC
TCAGTCGGTGCTATGATATAATACCTGAACTTTACTATTAGTGACAAGAGCTGGGGTTAGGATCCGTTGGACT
CTGACATCGGATGCCCTCAAACATACAGAACTTCCAACTCAAGTCCAGCCATAAGCTATTTTGGCAACATGCA
GAGTAATCTGATTTTGTATGTGATTCTACTTTTATAGACTGTTTTAAACAATATAACACATTTTATAAA
AATAGTGCTTAAACTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1578

MHRKHLQEIPDLSSNVATSFTWGWDSKTSSELLSGMGVSALEKEEPPDSENIPQELLSNLGHPESP
PRKRLKSKGS
DKDFVIVRRPKLNRENFP
GVSWDSLPEDELLGIF
SCLCLPELLKVSGVCKRWYRLASDESLWQTL
DLTGKNLHPD
VTGRLLSQGVIAFRCP
RSFMDQPLAEHFS
PFRVQHMDLSNSV
IEVSTLHGILSQCS
KLQNL
SLEGLRLSDP
IVNT
LAKNSNLVRLNLSGC
SGSEFALQTL
LSSCSRLELNL
SWCFDFTEKHVQV
AVAVHSETITQ
NL
SGYRKNLQKS
DLSTLVRRCFNLV
HLDLSDSVMLK
NDCQ
QEFFQLNYLQ
HLSLSRCYD
IIPETLLVTRAGV
RIRLDS
DIGCPQTY
RTSKLKSSHKLF
CQHVRVICIFV
CDFYFYRLVLKQ

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FIGURE 1579

GAATTCGGGCTGTAGAGCCTTGCGCGCGCAGTGGGGATGGAACGTTGCTAGGCTTAGCGGGTCTGGCTGCTGGG
GGCCCCGAGCAGCAGCTCGGAGCCGCCGCGCCAAAGCGGGAATCTGGGAGCGAGCAGCTCTGCAGTTAATGC
ACGTATTTTAAACTCCCGGGCTGCGGACGCTATGACAGGAAGCACCTCCAGGAGATTCCAGACCTGAGTAGCA
ACGTTGCCACCAGCTTCACGTGGGGATGGGATCCAGCAAGACTTCTGAACTGCTGTGAGGCATGGGGGTCTCCG
CCCTGGAGAAAGAGGAGCCCCGACAGTGAGAACATCCCCAGGAACCTGCTCTAAACCTGGGCCACCCGGAGAGCC
CCCCACGGAAACGGCTGAAGAGCAAGGGAGTGACAAAGACTTTGTATTGTCGCGAGGCCCTAAGCTAAATCGAG
AGAACITTTCCAGGTGTTTCATGGGACTCCCTTCGGGATGAGCTGCTCTTGGGAATCTTTTCTGTCTGTGCCTCC
CTGAGCTGCTAAAGGCTCTGTGTGTTTGTAAAGGTGGTATCGCCTAGCGTCTGATGAGTCTCTATGGCAGACCT
TAGACCTCACAGGTAAAAATCTGCACCCGGATGTGACTGTCGGTTGCTGTCTCAAGGGGTGATTGCCTTCGGCT
GCCCACGATCATTATGGACCAACCATTTGCTGAACATTTTCAGCCCTTTTCTGTGACAGCATGACCTATCGA
ACTCAGTTATAGAAGTGTCCACCCTCCACGGCATACTGTCTCAGTGTTCAGATTGCAGAATCTAAGCCTGGAAG
GCCTGCGGCTTCGGATCCCATTTGTCAATACTCTCGCAAAAACCTCAAATTTAGTGCGACTTAACCTTTCTGGGT
GTTCTGGATTCTCTGAATTTGCCCTGCAGACTTTGCTAAGCAGCTGTTCCAGACTGGATGAGCTGAACCTCTCCT
GGTGTTTTGATTTCACGTAAAAGCATGTACAGGTGGCTGTTGCGCATGTGTCAGAGACCATCACCCAGCTGAATC
TTAGCGGCTACAGAAAGAACTCCAGAAATCAGATCTCTCTACTTTTAGTTAGAAGATGCCCAATCTTGTCCATC
TAGACTTAAGTGATAGTGTCACTGCTAAAGAATGACTGCTTTAGGAATTTTCCAGCTCAACTACCTCCAACACC
TATCACTCAGTCGGTGCTATGATATAATACCTGAAACTTTACTTGAACCTGGAGAAATCCCACTAAAAACAC
TACAAGTTTTTGAATCGTGCCAGATGGTACCTTCAACTGTTAAAGGAAGCCCTTCCTCATCTCAGATTAAT
GCTCCCAATTCACCACCATTCACAGGCCCAACTATTGGCAACAAAAGAACCCAGGAGATATGGGGCATCAAAATGCC
GACTGACACTGCAAAAGCCAGTTGTCTATGAAAGTATTATTGCAGGATGGTGTCTCTCTTTAGAACAGGGAAA
ATAGGCAGGAAGCCCAATTGCTGGAGTACTTAGCTAGTTTTATTCTTGGTTTTCCCTTGCCCTTCATTCTGCAAG
TATACTAGGGAGCCATTTGAGAGGG

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FIGURE 1580

MHRKHLQEIPDLSSNVATSF TWGWDSSKTSSELLSGMGVSALEKEEPPDSENIPQELLNLGHPESPPRKRLKSKGS
DKDFVIVRRPKLNRENFP GVSWSLDPDELLLGIFSCCLCPPELLKVSGVCKRWYRLASDES LWQTLDLTGKNLHPD
VTGRLLSQGVIAFRCP RSFMDQPLAEHFSPPFRVQHMDLSNSVIEVSTLHGILSQCSKLQNL SLEGLRLSDPIVNT
LAKNSNLVRLNLSGCSGFSEFALQTLSSCSRLEDELNLWCDFDTEKHVQVAVAHVSETITQLNLSGYRKNLQKS
DLSTLVRRCPNLVHLDLSDSVMLKND CFQEFFQLNYLQHLSLSRCYDIIPETLLELGEIPTLKTQLQVF GIVPDGT
LQLLKEALPHLQINCSHF TTIARPTIGNKKNQEIWGIKCRITLQKPSC L

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FIGURE 1581A

ATTCTTCTAAGGAGCCTAAATTACCAAGTGCCGTTCACTGAGCGAGAGACTTTTTTCATGCCACTGGACAGTG
AGGTTTCATCATGGTACAAAGAACTAGGACCCATACAGCTGTTTCTATACAGAGAAGAACACTCAAGAATTGGACTC
ARGAATGGAAAGAAATGCCCTGATTATGTTTCTGCTGGGGAAACAGCTGTTACTTTAATTCATCGTTTACTCCCA
TCTGGTATACCTTATTGTATCAAGCTAACTAGCAATGGTGGTACAGTGGATGAAAGTGTTCCTCTGTTGATGAAA
TAGTGCAACAGATGCCACCCATTGCCCTCAACTGGACTTTACTGAACGTGAGTTTAACTGGGATTCATGACAGATA
TCCAAGTGAGATGGGAAGCACCAGCAATGACGATATTCAGAAAGATGGATGTTCTGGAGTATGAACCTCAAT
ACAAAAGAGTAAATGAACTAAATGGAAAATGATGGACCTATATTGACACATCAGTCCAGTGTACTCATTTGA
AAGTGGATAAGGAATATGAAGTGCCTGTGAGATCCAAACAACGAAACTCTGAAATTTATGGCAGTTCAGTGAGG
TGCTCTATGTAACACTTCTCAGATGAGCCAATTATACATGTGAAGAAGATTCTACTTTCCATGGCTCTTAATTA
TTATCTTTGGAATATTGGGCTAACAGTGATGCTATTTGTATTCTTATTTTCAAACAGCAAGGATTAAAATGCG
TGATTCTGCCCCAGTTCCAGTTCCAAAGATTAAAGGAATCGATCCAGATCTCCTCAAGGAAGAAAATTAGAGG
AGGTGAACACAATCTTAGCCATTATGATAGCTATAAACCCGAATTCACAGTGATGACTCTTGGGTTGAATTTA
TTGAGCTAGATATTGATGAGCCAGATGAAAGACTGAGGAATCAGACACAGACACTTCAAGCAGTGACCATG
AGAAATCACATAGTAACCTAGGGGTGAAGGATGGCGACTCTGGACGTACCAGCTGTTGTGAACCTGACATTCTGG
AGACTGATTTCATATGCCAATGACATACATGAGGGTACTCAGAGGTTGCTCAGCCACAGAGGTTAAAAGGGGAAG
CAGATCTCTTATGCTTGACAGAGAAGAACTCAAATAAATCACTTATCATGATGCTTGCCTGCTACTCAGCAGC
CCAGTGTTATCCAAGCAGAGAAAACAAACCAACCACTCTCTACTGAAGAGCTGAGTCACTACCAAGCTG
CCCATATTCAAGTAAAGCAATCCAAGTCTCAAGTCTCAACATCGACTTTTATGCCAGTGAGACATACACCCG
CAGGTAGTGTGGTCCCTTTCCCCGGGCCAAAAGATAAGGCGAGGATGTCCCAATGTGACATGCACCCGGAATGG
TCTCACTCTGCCAAGAAATCTCTCTATGGACAATGCCTACTTCTGTGAGGACAGATGCCAAAAGTGGCTCCCTG
TGCGTCTCTACATCAAGGTGAATCACACATACAGCCCAAGCTTAAACCAAGAGACATTTACATCACACAGAAA
GCCTTACCAGTGTCTGCTGGGAGGCTGGGACAGAGAAATGTTCCAGGTTCTGAGATGCTCTCCAGACATATA
CCTCCATTATATAGTACAGTCCCCACAGGGCCCTCACTCAATGCGACTGCCTTGCCTTGCCTGACAAAGAGT
TTCTCTCATCATGTGGCTATGTAGGCACAGACCAACTGAACAAAATCATGCTTAGCCTTTCTTGGTTTCCCAA
GAGCTACGTATTTAATAGCAAGAAATGACTGGGGCAATAACGTTTAAAGCCAAAACAATGTTTAAACCTTTTGTG
GGGAGGTGACAGGATGGGGTATGGATTCTAAAATGCCCTTTCCCAAAATGTTGAAATATGATGTTAAAAAATAA
GAAGAATGCTTAATCAGATAGATATTCCTATTGTGCAATGTAAATATTTTAAAGAATTTGTGCAGACTGTTTAGT
AGCAGTGATTGCTTAATATTGTGGGTGTTAATTTTGTACTAAGCATTGAATGACTATGTTTAAATGTATAG
TAAATCACGCTTTTGAAGAAAGCAAAAATCAGGTGGCTTTTGGCTTCAGGAAAATGAATGCAAAACCATAGC
ACAGGCTAATTTTGTGTTTCTTAAATAAGAAACTTTTATTATTAAGAAATCAAGGATGAGAAATTT
TAAACTATAAGCAAGAGAGCAAAAATAGTTTGGATATGAAAACTTATTTTGATCAAGTTGATAGAAATAT
TTTTAATAATTAGACTTCAAGCATGGCTATTTTATATTAACACTACACACTGTGTACTGCAAGTTGGTATGACCC
TCTAAGGAGTGATGCAACTACAGTCTAAAGCTGGTTTAAATGTTTGGCCCAATGCACCTAAAGAAAAACAACTCG
TTTTTTACAAAGCCCTTTTATGCTCCCAAGCTCCTTCAACAATCTCAAAATGTTGTAGTAACTGCATTAAT
GGAATATAATTTGTTTATCTGAAATTTTAAACAAGTATTGTTAATTAGAAAACCTTAAAGCGTTTGCACAGAT
CAACTTACCAGGCACAAAAGAAAGTAAAAGCAAAAAGAAAACCTTCTTACCAAACTCTTGGTGTATGCCAAAA
AAAAATACATGCTAAGAGAAGTAGAATCATAGCTGGTTCACACTGACCAAGATACTTAAGTGCTGCAATTGCAC
CGGAGTGAGTGTTTTATGTGCTGCGATGATGGTGAGAGATAAGATCTATAGCTCTGACGGGAATCTGTTCACAC
CCAAGTTGGTTTGTCTAGTATTTTCCAGGAAGGGAATAAGTACAAAGAGCAATTTGTGTGTGTGTGTGTGTGTGAGA
GAATGAAATTAACCTGGTAAATGAACCAAGAGTTCAAGAAATAAGTTTGTGTTTCAAGACCTATAACGACACACA
TACTCATTTTTCATGATAATGAACAGAACATAGACAGAAAGAAACAGGTTTTCAGTCCCAACAGATTAAGTCAAA
TTATTTAAACCGCTAAAAGAACTTTCTTCTCAATAACTCTTTTATAGGATTTATTTAAATAGCAAAAAGAA
AGTTTTCATCATTTTTCATCTCCTCTGAGTGGACTGGCCTCAAAGCAAGCATTGAGAAAGAAAGAGCAACCT
CAGTAATTTAGAAATCATTTTGCAATCCCTTAATATCCTTAAACATCATTCATTTTGTGTGTGTGTGTGTGTGTGAGA
CAGAGTCTCGCTCTGTGCGCAGGCTAGAGTGCAAGTGGCGCATCTTGACTCACTGCAATCTCCACTCCCAACAGG
TTCAGGCGATTCCCGTGCTCAGCCTCTGAGTAGTGGGACTACAGGCACGCAACCACTGCCAGGCTAATTTT
TTTGTATTTAGCAGAGAGGGGTTTACCATTGTTGGCAGGTGCTTCAGATCTCTGACCTCTGATGCTGATCACC
GACTCGGCTCCCAAAGTGCTGGGATACAGGTGTAAGCCCGTGCCAGCCCTTAAACATCATTTCTTGAGAGCA

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FIGURE 1581B

TIGGGATATCTCCTGAAAAGSTTTATGAAAAAGAAGAATCTCATCTCAGTGAAGAATACTTTCATTTTTTAAAA
AAGCTTAAAACTTTGAAGTTAGCTTTAACTTAAATAGTATTTCCCATTTATCGCAGACCTTTTTTAGGAAGCAAG
CTTAAATGGCTGATAATTTTAAATTCTCTCTCTTGCAAGGAAGGACTATGAAAAGCTAGAATTGAGTGTTTAAAGTT
CAACATGTTATTTGTAATAGATGTTTGATAGATTTTCTGCTACTTTGCTGCTATGGTTTTCTCCAAGAGCTACAT
AATTTAGTTTCATATAAAGTATCATCAGTGTAGAACCTAATTCAAATTCAAAGCTGTGTGTTGGGAAGACTATCTT
ACTATTTCAACAACAGCCTGACAACTTTCTATAGCCAAAAATAGCTAAATACCTCAATCAGTCTCAGAAATGTCAT
TTTGTTACTTTGGTGGCCACATAAGCCATTATTCAC TAGTAGTACTAGTTGTGCTGGCAGTTTATATTAACTC
TCTTTATGCTGTGGATTTTTCTCTCAAAGTTTAAATAAATTTATTTCTTGGATTCTGATAGTGIGCTTCTGT
TATCAAAACCAACATAAAAATGATCTAAACC

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FIGURE 1582

CCTTCACACAGCTCTTTCACCAATGCTGGATCACTTCCTTTGAATGCAGAAGCTTGCTGGCCAAAAGATGTTGGG
ATTGTTGCCCTTGAGATCTATTTTCCTTCTCAATATGTTGATCAAGCAGAGTTGGAAAAATATGATGGTGTAGAT
GCTGGGAAGTATACCATTTGGCTTTGGGCCAGGCCAAGATGGGCTTCTGCACAGATAGAGAAGATATTAACCTCTCTT
TGCATGACTGTGGTTCAGAACTCTTATGGAGAGAAATAACCTTTCCTATGATTGCATTGGGCGGCTGGAAGTTGGA
ACAGAGACAATCATCGACAAATCAAAGTCTGTGAAGACTAATTTGATGCAGCTGTTTGAAGAGTCTGGGAATACA
GATATAGAAGGAATCGACACAACCTAATGCATGCTATGGAGGCACAGCTGCTGCTTCAATGCTGTTAACCTGGATT
GAGTCCAGCTCTTTGGGATGGACGGTATGCCCTGGTAGTTGCAGGAGATATTGCTGTATATGCCACAGGAAATGCT
AGACCTACAGGTGGAGTTGGAGCAGTAGCTCTGCTAATTGGGCCAAATGCTCCTTTAATTTTTGAACGAGGGCTT
CGTGGGACACATATGCAACATGCCTATGATTTTTACAAGCCTGATATGCTATCTGAATATCCTATAGTAGATGGG
AAACTCTCCATACAGTGCTACCTCAGTGCATTAGACCGCTGCTATTCTGTCTACTGCAAAAAGATCCATGCCAG
TGGCAGAAAGAGGGAATGATAAAGATTTACCTTGAATGATTTTGGCTTCATGATCTTTCACCTCACCATATTGT
AAACTGGTTCAGAAATCTCTAGCTCGGATGTTGCTGAATGACTTCCTTAATGACCAGAATAGAGATAAAAAATAGT
ATCTATAGTGGCCTGGAAGCCTTTGGGGATGTTAAATTAGAAGACACCTACTTTGATAGAGATGTGGAGAAGGCA
TTTATGAAGGCTAGCTCGAACTCTTCAGTCAGAAAACAAAGGCATCTTTACTTGTATCAAATCAAATGGAAT
ATGTACACATCTTCAGTATATGGTTCCTTGCACTGTCTAGCACGACTACCTCAGCAATTAGCAGGGAAG
AGAATTGGAGTGTTCCTATGGTTCGGTTTGGCTGCCACTCTGTACTCTCTTAAAGTCACACAAGATGCTACA
CCGGGCTGTCTCTTGATAAAATAACAGCAAGTTTATGTATCTTAAATCAAGGCTTGATTCAAGAACTGGTGTG
GCACCAGATGTCTTCGCTGAAACATGAAGCTCAGAGAGGACACCCATCATTTTGGTCAACTATATTTCCCGAGGT
TCAATAGATTCACTCTTTGAAGGAACGTGGTACTTAGTTAGGTGGATGAAAAGCACAGAAGAACTTACGCTCGG
CGTCCCACTCCAATGATGACACTTTGGATGAAGGAGTAGGACTTGTGCATTCAAACATAGCAACTGAGCATATT
CCAAGCCCTGCCAAGAAAGTACCAAGACTCCCTGCCACAGCAGCAGAACCTGAAGCAGCTGTCTATTAGTAATGGG
GAACATTAAGATACTCTGTGAGGTGCAAGACTTCAGGGTGGGGTGGGCATGGGGTGGGGGTATGGGAACAGTTGG

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FIGURE 1583

MPGSLFLNAEACWPKDVGIVALEIYFSPQYVDQAELEKYDGVDAKGYTIGLGQAKMGFCTDREDINSLCMTVVQN
LMERNNLSYDCIGRLEVGTETIIDKSKSVKTNLMQLFEESGNTDIEGIDTTNACYGGTAAVFNNAVNWIESSWDG
RYALVVAGDIAVYATGNARPTGGVGAVALLIGPNAPLIFERGLRGTHMQHAYDFYKPDMLSEYPIVDGKLSIQCY
LSALDRCYSVYCKKIIHAQWQKEGNDKDFTLNDFGFMIFHSPYCKLVQKSLARMLLNDFLNDQNRDKNSIYSGLEA
FGDVKLEDTYFDRDVEKAFMKASSELFSQRTKASLLVSNQNGNMYTSSVYGSASVLAQYSPQQLAGKRIGVFSY
GSGLAATLYSLKVTQDATPGSALDKITASLCDLKSRLDSRTGVAPDVFAENMKLRDTHHLVNYIPQGSIDSLFE
GTWYLVVRVDEKHRRTYARRPTPNDDTLDEGVGLVHSNIATEHIPSPAKKVPRLPATAAEPEAAVISNGEH

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FIGURE 1584

CAATGGGTTTGCCACCAGAACACAGGTGTTGTGAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCA
TATCAACATTGTCGTCATTGGACACGTAAATTCGGGCAAGTCCACCCTACTGGCCATCTGACCTACAAATGTGG
TGGCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGACTCCTTCAAGTATGC
CTGGGCTCTTGCATAAACTGAAAGCTGAGCGTGAACTGGTATCACCATTGATATCTCCTTGTGGAAATTTGAGAC
CAGCAAGTACTATGTGACTATCATTGATGCCCCAGGACTCAGAGACTTCATCAAAAACATGATTACAGGGACATC
TCAGGCTGTGCTGCTGCTGATTGGTTGCTGCTGGTGTGGCGAATTTGAAACTGGTATCTCCAAGAATGGGCAGACC
TGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACTAATTGTTGGTGTAAACAAAATGGATTCCACT
GAGCCACCCTACAGCCAGAAGAGAGAAGAGGAAATTTGTTAAGGAAGTCAGCACTTACATTAAAGAAAATGGTTAC
AACCTTGACACAGTAGCATTGTTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCGAGTGCTAACATG
CCTTGGCTCAAGGGATGGAAGGCCACCCGTAAGGATGGCAGTGCCAGCGGCACCATGCTGCTTGAGGCTCTGGAC
TGCATCCTACCACCAACTCATCCAAC TGACAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTTGGTGGT
ATTGGTACTGTTCTGTTGGCCGAGTGGAGACTGGTGTCTCAAACCTGGTGTGGTGGTCACTTTGCTCCAGTC
AACATTACAACAGAAGTAAAACTCTGCGAAATGCACCATGAAGCTTTGAGTGAAGCTCTCTCTGGGGACAATGTG
GGCTTCAATGTCAAGAATGTGCTGTCAAGGATGTTGCTGCTGGCAACGTTGCTGGTGACAGCAAAAATGACCCA
CCAATGGAACAGCTGACTTCATTGCTCAGGTAATTATCCTGAACCATCCAGGCCAAAATAGCGCTGGCTATGCC
CCTATATTGGATTGCCACGCGGCTCACATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGCGGTTCT
GGTAAAGCTGGAAGATGGCCCTAAATTTCTGAAGTCTGGTGATGCTGCCATTGTTGATATGGTTCTGGCAAG
CCCATTGTTGAGAGCTTCTCAGACTATCCACCTTTGGGTCAATTTGCTGTTGCTGATATGAGACAGACAGTTGCG
GTGGGTGTCATCAAGCAGTGGACAAGAAGGCTGCTGGAGGTGGCAAGGTCACGAAGTCTGCCAGACAGCTCAG
AAGGCTAAATGAATATTATCCCTAATACCTGCCACCAACTCTTAATCAGTGGTGAAGAAATGGTCTCAGAACTG
TTTGTTCATTTGGCCATTAAAGTTTAGTAGTGAAGACTGGTAAATGATAAATGCATCGTAAACCTTCAGA
AGGAAAGGAGAATGTTTTGTGGACCACTTTGGTTTTCTTTTTGCATGTGGTAGTTTTAAGTTATTAGTTTTAA
AATCAGTACTTTTTAATGGAACAACCTTGACCAAAAATTTGTCACAGAATTTTGAGACC

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FIGURE 1585

MDSTEPYPYSQKREEEIVKEVSTYIKKIGYNPDIVAFVPI SGWNGDNMLEPSANMPWLKGWKATRKDGSASGTMLL
EALDCILPPTHPTDKPLRLPLQDVYKIGGIGIVPVGRVETGVLKPGVVVTFAPVNIITTEVKSVMHHEALSEALP
GDNVGFNVKNVSVKDVRRGNVAGDSKNPPMETADFIQV IILNHPGQISAGYAPILDCHAAHIACKFAELKEKI
DRGSGKKLEDGPKFLKSGDAAIVDMVP GKP IVE SFSDYPP LGHFAVRDMRQTVAVGV IKAVDKKAAGGKVKISA
QTAQKAK

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FIGURE 1586

CACAGGTGTTGTGAAAACCTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATATCAACATTGTCGTCATTG
GACACGTAAATTCGGGCAAGTCCACCCTACTGGCCATCTGACCTACAAATGTGGTGGCATCGACAAAAGAACCA
TTGAAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGACTCCTTCAAGTATGCCTGGGTCTTGCATAAAGTGA
AAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTTGTGGAAATTTGAGACCAGCAAGTACTATGTGACTA
TCATTATGCCCTTCCTGGCTTACACACTGGGTGTGAAACAACCTAATTGTTGGTGTAAACAAAATGGATTCCACTGA
GCCACCCCTACAGCCAGAAGAGAGAAGAGGAAATTTGTTAAGGAAGTCAGCACTTACATTAAAGGGTGACAACATGCT
GGAGCCGAGTGCTAACATGCCCTTGGCTCAAGGGATGGAAGCCACCCGTAAGGATGGCAGTGCCAGCGGCACCAT
GCTGCTTGAAGCTCTGGACTGCATCCTACCACCAACTCATCCAAGTGAACAAGCCCTTGCGCCTGCCTCTCCAGGA
TGCTTACAAAATTTGGTGGTATTGGTACTGTTCCCTGTTGGCCGAGTGGAGACTGGTGTCTCAAACCTGGTGTGGT
GGTCACCTTTGCTCCAGTCAACATTACAACAGAAGTAAATCTGTCGAAATGCACCATGAAGCTTTGAGTGAAGC
TCTTCCCTGGGGACAATGTGGGCTTCAATGTCAAGAATGTGCTGTCAAGGATGTTTCGTCGTGGCAACGTTGCTG
TGACAACCATCCAGGCCAAATAAGCGCTGGCTATGCCCTATATTGGATTGCCACGCGGCTCAC

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FIGURE 1587

AAATTGTTAAGGAAAGTCAGCACTTACATTAAGAAAATTGGTTACAACCCGTGACACAGTAGCATTTGTGCCAATTT
CTGGTTGGAATGGTGACAACATGCTGGAGCCGAGTGCTAACATGCCTTGGCTCAAGGGATGGAAAGCCACCCGTA
AGGATGGCAGTGGCAGCGGCCACCATGCTGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCATCCAATGACA
AGCCCTTGCCTGCTCTCCAGGATGCTACAAAATTGGTGGTATTGGTACTGTTCTGTTGGCCGAGTGGAGA
CTGGTTTCTCAAACCTGGTGTGGTGGTCACCTTTGCTCCAGTCAACATTACAACAGAAAGTAAAACTGTCTGAAA
TGCACCATGAAGCTTTGAGTGAAGCTCTTCTGGGGACAATGTGGGCTTCAATGTCAAGAATGTGTCTGTCAAGG
ATGTTCTGTCGTGGCAACGTTGCTGGTGACAGCAAAAATGACCCACCAATGGAAACAGCTGACTTCAATTGCTCAGG
TAATTAATCCTGAACCATCCAGGCCAAATAAGCGCTGGCTATGCCCTATATTGGATTGCCACGCGGCTCACATTG
CATGCAAGTTTGTGAGCTGAAGGAAAAGATTGATCGCGGTCTCTGTTAAAAAGCTGGAAGATGGCCCTACCACTT
TTGGGTCAATTTGCTGTTCTGATATGAGACAGACAGTTGCGGTGGGTGTCATCAAAGCAGTGGACAAGAAGGCT
GCTGGAGGTGGCAAGGTACGAAGTCTGCCAGACAGCTCAGAAGGCTAAATGAATATTATCCCTAATACCTGCC
ACCCAATCTTAATCAGTGGTGGAAAGTGGTCTCAGAAGTGTGTTTCAATTGGCCATTTAAGTTTAGTAGTG
AAGACTGGTACTTTTAAATGGAACAACCTTGACCAAAAATTGTGCAGAAATTTGAGACCTGTAAAAAAGTT
TAATGAG

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FIGURE 1588A

TTTGTCCATGTCTCGGACAGAGCCTGGGAAGCTGCCAGTGTGAGATTTCAGAGACCAAGAGCGCGAAGGGCGGGCG
ATGTGGCAATCCGCTCTGGGATGTGAAAAGCGTGGAGCGCATTTAGAGGAATTCGACGAAAACACAGGAAATCACT
CCTCTCCCGCTCTTGGGCGCGCTGCCACTGGGACAGAGGACTGGGAACCGCGGACGCGGATAAGTGGCCGACG
CAGAGAGCGCAGCTCCCGCGCCGGTCTGCCCTGCGAACCAGCGCGGCCCTCGGCGCTGAGGCTGCTCCGCGC
ATGCGCCCTCGGCGCCCGCGCCCGCGGGGTGCTGTGCGCTGCTGCTGCTCACTGTTGTTCTACGCTGC
TGCGTATCATTCAATGTTGATGTGAAAAATTCATGACTTTACGCGCCCGGTGGAAGACATGTTTGGATATACT
GTTCAACAATATGAAATGAAGAAGAAAAATGGTGCTTATTGGTTCTCCGTTAGTTGGCCAAACCAAAAAACAGA
ACTGGAGATGTCTATAAGTGTCCAGTTGGGAGAGGTGAATCATTACCTGTGTAAAGTTGGATCTACCACTTAAT
ACATCAATCCCAAATGTACAGAAAGTAAAGAGAAACATGACATTTGGATCAACTTTAGTCACCAACCAAAATGGA
GGATTTCTGGCTTGTGGGCGCTTATATGCCATATAGATGTGGACATTTGCATTACACAACCTGGAATCTGTTCTGAC
GTCAGCCCCACATTTCAAGTCGTGAATTCATTGCCCTGTACAGAATGCAGCACTCACTGGACATAGTCATA
GTGCTGGATGGTTCCAAAGATTTACCCATGGGACAGTGTACAGCTTTTTTAAATGACCTTCTTGAAAGAAATG
GATATTTGGTCTTAAACAGACACAGGTTTGAATTTGACAGTATGGAGAAAACGTGACCCATGAGTTCAACCTCAAT
AAGTATTTCTCCACCGAAGAGGTACTTGTTCAGCAAAAGAAAATAGTCCAGAGAGGTGGCGCCAGACATATGACA
GCTCTTGGAAATAGACACAGCAAGAAAGGAGGCATTACGGAAGCCCGGGTGGCCGAAGAGGAGTTAAAAAGTC
ATGGTTATTGTGACAGATGGAGAGTCTCATGACAATCATGCACTGAAGAAAGTCACTCAAGACTGTGAAGATGAA
AACTATTCAACGGTTTTCCATAGCTATTTCTGGCAGCTATAACCGAGGAAATTTAAGCACTGAAAAATTTGTGGAG
GAAATAAAACTAATTGCAATGACCACTGAAAAGCAATTTCTCAATGTCTCTGATGAATGGCTCTAGTCACC
ATTGTTAAAACTCTGGGAGAAAGAAATATTGCCCTGGAAGCCACAGCTGACCAGTCAGCAGCTTCATTGAAATG
GAAATGTCTCAGACTGGCTTCAGTGCTCATTTACACAGGACTGGGTCTATGCTGGAGCAGTAGGAGCCATATGAT
TGGAAATGGAACAGTGTGATGACAGAAAGCTAGTCAAAATCAATCCCTCGAAACACAACCTTTAATGTTGAGTCT
ACCAAAAGAAATGAACCGCTTGCTTCTATTAGGTTACACTGTAACCTCTGCTACTGCTTCTCTGGAGATGTG
CTCTATATTGCTGGACAGCCTCGGTACAATCATACAGCCAGGTCATTATCTACAGGATGGAAGTGAACATCA
AAAATTTCTCCAGACGCTCAGTGGAAACAGATTTGGTTCTACTTTTGGCAGTATTTTAAACAACACTGACATTGAC
AAGGATTTCTAATACTGACATCTTCTAGTCGGAGCCCTATGTACATGGGAACAGAGAAGGAGGAGCAAGGAAAA
GTGATGTGTATGCTCTCAATCAGACAAGGTTTGAATATCAAAATGAGCCTGGAAACCTATTAAAGCAGACGTGCTGT
TCATCTCGGCAGCACAAITTCATGCACAACAGAAAACAAAAATGAGCCATGCGGGGCTCGTTTGGAACTGCAATT
GCTGCTGTAAAGACCTCAATCTTGATGGATTAAATGACATCGTAGGAGCTCCGCTGGAAGATGATCACGGG
GGAGCTGTGTACTTTATCATGGAAGTGGCAAGACTATAAGGAAAGAGTATGCACAACCTATTTCATCAGGTGGG
GATGGTAAGACACTGAAATTTTTTGGCCAGCTCATCCACGGGAAATGGATTTTAAATGGTGGACGGTCTGACAGAT
GTGACTATTTGGGGGGCTTGGTGGTCTGCGCTCTCTTGCTGCCGAGATGTGGCGTAGTTTAAAGTGACCATGAAT
TTTGAGCCAAATAAAGTGAATATTCAAAAGAAAACTGCCATATGGAAGGAAAGGAAACAGTATGCATAAATGCT
ACAGTGTGTTTTGATGTGAAATTAAGTCTAAAGAAAGACAGGATTATGAAGCTGATTTGCAATACCGTGTCAAC
CTAGATTCACATAAGACAAATATCAGCAAGTTTTTTCTGGAACCTCAAGAGAGAAGGTTCAAAGGAACATACACA
GTTTCGAAAAATCAGAATGACATAGCACTCCTTCTACATGTTGACAAAGCATGACTTTACAGGACTCTGTGAAGAA
CGTTGGACTTTAACTCTACCGATCCAGAAAATGGCGCTGTTCTTGATGATTTCTCTACCAACTCAGTACATGAAT
ATATTCCCTTTGCCAAAGATTGTGAAAAAAGGAAAAATGTATCTCAGACCTCAGCCTGCATGTCGCCACCACTG
AAAAGGACCTGCTGATTGTGCGATCCGAGATGATAAGTCAACGTTAGCCTCAGAGTCAAAAATACAAAGGACA
GCTCATAAACCAGGAGGATGTGCAATTTATCTCCAAATCTAGTTTTTTCAGAAATTTGAGGCTATCCAAAAG
ACAGTGTGTAATCTAATCATAATATCATGTAAAGTTGGATATCCCTCTGAGAAAGGAGAGATGGTAACCT
TCAAAATATTGTTTCAGTTTAAACACATCTCTATCTATGAAAATGTGCAACTTATTTAAGTGCACAAGTACCA
CGGAAGAACCTCTGGAACCTTTCTGATAATGTAGTAAACATTTCTATCCCGGTAAAAATGAAGTTGGACTAC
AGTTTTCAGCTGTGCAAGTGAATACCAATTTCAATTGCTGCCAATGAGACAGTCCCTGGAAGTTATTAATTTCTA
CTGAGCAATTGGAATGAAATTAATATCTCTCTATGATTGAAAGAGTGAGCTTTTCCAAATGCCACAGAGCTTA
AGCTGTCAATTTCAATCCCAATATGACATCAATGGTTACCCCTGTGCTGTACCCAACCTGGATGTGATCTCTG
AGATGCAAACTGCAGACCCCAATCTTTGAGGACTCTTTTCAGTATCAACTCTGAAAAGAAAATGACATACAA
CTGACCATCTCAAACGAGGACAAATTTGGAGTGAATACATGTAATTTGCTACCATCAGATGTAATCTCACTT
CTTCTGACATCAGCCAAGTCAATGTTTCGCTTATCTTGTGGAACCAACTTTTATAAATCATATTTTCCAGCT

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FIGURE 1588B

TAAATCTTACTATAAGGGGAGAAGCTTCGGAGTGAAAAATGCATCTCTGGTTTAAAGTAGCAGCAATCAAAAAAGAG
AGCTTGCATTCAAATATCCAAAGATGGGCTACCGGGCAGAGTGCCATTATGGGTCATCTCTGCTGAGTGCCTTTG
CCGGATTGTTGCTGTTAAATGCTGCTCATTTTAGCACTGTGGAAGATTGGATTCTTCAAAAGACCACTGAAAAAGA
AAATGGGAGAAATGAAATATTTTATGAAGAAAAATAAACAATTATTCAATAATCTATCCTCAGGTTTGGCTCAA
ATATGTGACAGAAGATGTATAATTCATGACATAGTCATGTAACTATGTAAATCCATCAGGAGTTCATTACTTGGAA
AATGACAGGTCATGCATTATCCAAAAACAATACCAAAAGACATATTTTATAAAATGACAAAAAATATTTTACAT
AATTACTCATTTTTGTTGAGTAAGCAAAATTAACAAGTGTTTTTAAAAAAACCTGTACAAAATATGTTTATGTATT
AAATCACCATCCAAAATATTTTAAAGGAATATATAAAAAGATTTTATGATCATAGAAAACATCTATTTTCAAAAACA
TATAAATTAAGCTTTTCCCTTGATTCTCTGTTGGATATCCATGTTCAGCATGACAGTCAGCACTCGTAATGCGCA
AGAAAAGAAATTACCTGAAAAGATCATTTCCTCTATTCAAATGAGAAATTTTCCCTTGGTAGAAATCCATATAC
AATATGGATTGAAAATTAAAGTACCAAGAATACATTTAGCATCTTTGTGTGGGTTCTATACCTAAAAATTTTCC
CTCCCTGCCAAGGTGATTGGAAGTACTGCAATTGAGCTAAAAATTTATCTAGGATGGAAGAAATCAGGATAGACT
CGTTTTAAACACAGTATATTAATGGGTTAAATTAAGCTTTTACAGAACATGCTTAATTTTGATATTGAGCTCTA
AATGCAAACTCTTTTATCTGAAAAACACTTAAAGTAGTTTGTGTGGCATCACAGTGATTGTGATGAAAAG
CCATATATGGGGACATGCTAAAAATGGCTTCTGAATGAAATACGACAGCAGAGAAAGATGCCACTGAAATGCTGA
AATTATCTTTGCTGAGCAGCTTTTGAATGCTAAGGGTTCCAGTATGTGACCAAGAAAGAGTTGTCTCAACTCC
TTGGTACAGGGTTCATTCAACCCCCAAGCTGTGAGAGTGTGTTTTATTTTAAATTTTTTAAAGGATATTTAAATT
CCAAACCACTTCTTATTTTTTGAAGAGACAATTTTCCATTTAGTATTACATTTTACCAAGAGTCACTGCTT
TTTAGGTGTGTCATCAATATTTAAATAAAATCCCAAGAAATGTATTTTAAAGAAATTCAGGTTTGAAGAACTCA
ACCAACAGGAAGATATCACACCTTTGTATGTGCTTCTTGTCTTGAAGTAGTCATTATGGTTTCATTGGAATCTA
CTGTAGCATAAAGCTCCTTAGGTTGCTCCATTTCTAGGAAAATAGCAATGAATGAATGTATAGTAGCTGCATGTGT
GAACACTGCTGTAAGGTTTGCTGACATTTCTGCAACAACTTTCTCCATCTGATTTACCAGAACCTGTAAACAG
ACCAGAACATGTATTCATCCAGAAATCCTGGGCTCTGCTTGTTCAAAGAGGAGCAAAATCCACATAGAAATTA
ATGTTATAAATTTATTTTTTAAACTAATTTCCAAAGAAATTTAGCTGAAGACTCAGAGTCAGCCTACCTCTTGAC
TCTCCACATCCGATCTAAGATCCTGAAGGCCAAAGGAATGCGCTGTGGGATGCCAAGGCCATCAGTAGCTGGA
AGAAAGAAATACCTCTTTCTAGAGGTTTGGTGCTCTTCTGCTGGCCTGTCTATTATTGGAATAACGGCCTTTTGG
ATTTCTCTCATTTTCGCTATTTCCAGGTTTCAGAAATCATACCTACCACCTGTCTCTTCTTTGCCAGTAAACCTC
AGGTTTCTCTTATTCAGAGTTACCATGTTGACACACCCCAAGTGTCTCAGCTGCCAGAGCCCTTCTCTGATCT
CAGCAAGATCTTAGTAGTAAAGCTAACGGATCCATTGAAATTCATACTCAGCATCTGTGACTACTGACAAAAGCC
CATTTACTGAACCATAAAGTGTGCATCTTTAACTAAATTTGTTAACTGAAAGGGGAAAAATAGAAATAGGGCATT
TTGAAGTTTTTGAAGAAAGAGAGGAAGAGCTGTTGGCCAGATCAAGAGATATCTATAAGCCCGGCACAATTTTA
ACATAAGTCATTCCTGGCTATTAAATGTAATATTTTCATGAACAGAGAAGTCTGTTTCTCTAATATTATATTGT
TGAGGTTTGTGTGTGTGTGTGTCATGTGCAGACACATGTACACATATAAATGAATACAAAAATAGCTCTAT
ACACCCAAAAACAGAGTTTACAGAAAAATAAACACAAAAGCTATATCTGCAAGACAGGTTTGATTCTATAGTTT
CATATAGTTTTCATATAGTTTTCATTTTATTAATTTTAGGTTTAACTTATAGTTCTGCAATATTTAAAAACAA
GTACAGCGGTTTGATTTAAAAAGTCAACAATGTTTCAAAACAGCTTTGTACAAATGTTATAAAAAATATTTA
ATGATTAAGAAATGTACTAGACTCTATCATTTTACTTTTAAACATTTAATTAGAAAAACAGGTGATATTTAAGAC
TATTTATAAATCTATTGGCCAAATTTGCCAAAA

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FIGURE 1589

MAPRPRARPGVAVACWLLTVVLRCCVSFNV DVKNSMTFSGPVEDMFGYTVQQYENEEGKWWLIGSPLVGQPKNR
TGDVYKCPVGRGESLP CVKLDLPVNTSIPNVTEVKENMTFGSTLVNPNNGGLACGPLYAYRCGHLHYTTGICSD
VSPTFQVVNSIAPVQECSTQLDIVIVLDGSNSIYPWDSVTAFLNDLLERMDIGPKQTQVGIVQYGENVTHEFNLN
KYSSTEEVLVAARKIVQRGRQTM TALGIDTARKEAFTEARGARRGVKKVMVIVTDGESHDNHRLLKKVIQDCEDE
NIQRFSIAILGSYNRGNLSTEKFVEEIKSIASEPTKHFNFVSDDELALVTIVKTLGERIFALEATADQSAASFEM
EMSQTGFSAHYSQDWVMLGAVGAYDWN GTVVMQKASQIIIPRNTTFNVESTKKNEPLASYLG YTVNSATASSGDV
LYIAGQPRYNHTGQVI IYRMEDGNIKILQTLSGEQIGSYFGSILITTDIDKDSNTDILLVGAPMYMGTEKEEQGK
VYVYALNQTRFEYQMSLEPIKQTCSSRQHNSCTTENKNEPCGARFGTAIAAVKDLNLDGFNDIVIGAPLEDDHG
GAVYIYHSGKTI RKEYAQRI PSGDGKTLKFFGQSIHGEMDLNGDGLTDVTIGGLGGAALFWSRDVAVVKVTMN
FEPNKVNIQKKNCHEGKETVCINATVCFDVKLKS KEDTIY EADLQYRVTLDSLRLQISR SFFSGTQERKVQRNIT
VRKSECTKHSFYMLTSMTFRTL

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FIGURE 1590

GTGTAGGGGTAGATTTTCGCTGCAGTGTTCCTCCGAGCCTGTTAGACGCAGCGCGCCGGGAGACTGAGAGAGGAAA
GGATAGAGGAAGTCTGCCCCTAGGCTGCATGAGTCGAAGCAAGCGTGTTTCCTTCCCGCCAGGCAAGTGCCCTTA
GAAACCGGGCCCCGCCCTTCTCGGCTGCATTCCCATCCCCTCTCCCGGGCGGAGGTGAGGACCTCCTTGGT
TCCTTTGGTTCTGTCAGTGAGCCCCCTCCTTGGCCATGAAGCTCGTGAGGAAGAATCGAGAAGGACAATGCGG
GCCAGGTGACCTTGGTCCCCGAGGAGCCTGAGGACATGTGGCACACTTACAACCTCGTGACGGTGGGCGACAGCC
TGC GCGCTCCACCATCCGCAAGGTACAGACAGAGTCTCCACGGGCAGCGTGGGCAGCAACCGGGTCCGCACTA
CCCTCACTCTCTGCGTGGAGGCCATCGACTTCGACTCTCAAGCCTGCCAGCTGCGGGTTAAGGGGACCAACATCC
AAGAGAATGAGTATGTCAAGATGGGGCTTACCACACCATCGAGCTGGAGCCCAACCGCAGTTACCCCTGGCCA
AGAAGCAGTGGGATAGTGTGGTACTGGAGCGCATCGAGCAGGCCTGTGACCCAGCCTGGAGCGCTGATGTGGCGG
CTGTGGTCATGCAGGAAGGCCCTCGCCCATATCTGCTTAGTCACTCCCAGCATGACCCCTCACTCGGGCCAAAGTGG
AGGTGAACATCCCTAGGAAAAGGAAGGCAATTGCTCTCAGCATGACCGGGCCTTGGAGCGGTTCTATGAACAGG
TGGTCCAGGCTATCCAGCGCCACATACACTTTGATGTTGTAAAGTGATCCTGGTGGCCAGCCAGGATTTGTGA
GGGAGCAGTTCTGCGACTACCTGTTTCAACAAGCAGTGAAGACCGACAACAACTGCTCTGGAACACCGGTCCA
AATTTCTTCAGGTACATGCCCTCCTCCGGACACAAGTACTCCCTGAAAGAGGGCCCTTTGTGACCCCTACTGTGGCTA
GCCGCCCTTCAGACACTAAAGCTGCTGGGGAAGTCAAAGCCTTGGATGACTTCTATAAAATGTTACAGCATGAAC
CGGATCGAGCTTTCTATGGACTCAAGCAGGTGGAGAAGGCCAATGAAGCCATGGCAATTGACACATTGCTCATCA
GCGATGAGCTCTTCAGGCATCAGGATGTAGCCACACGGAGCCGGTATGTGAGGC TGGTGGACAGTGTGAAAGAGA
ATGCAGGCACCGTTAGGATATTCTTAGTCTTCACGTTTCTGGGGAACAGCTCAGCCAGTTGACTGGGGTAGCTG
CCATTCTCGCTTCCCTGTTCCCAAGTCTTCTGACCAAGAGGGTGATTCAGTTCTGAAGAGGATTAAATGATTGA
AACTTAAAATTGAGACAATCTTGTGTTTCCCTAACTGTTACAGTACATTCTCAGCATCCTTGTGACAGAAAGCT
GCAAGAATGGCACTTTTGATTATACAGGGATTCTTATGTCTTTGGCTACACTAGATATTTGTGATTTGGCAA
GACATGTATTTAAACAATAAATA

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FIGURE 1591

CTTCCTTTTTCGGCTATCACCGAAGCAGGAGTGGCCAAAATGAAGTTTAATCCCTTTGTGACTTCCGACCGAAG
CAAGAATCGCAAAGGCATTTCAATGCACCTTCCCACTTCGAAGGAAGACTATGTCTTCCCCTCTTTCCAAAGA
GCTGAGACAGAAGTACAACGTGTGATCCATGCCCATCCGAAAGGATGATGAAGTTCAGGTTGTACATGGACACTA
TAAAGGTCAGCAAATTGGCAAAGTAGTCCAGGTTTACAGGAAGAAATATGTTATCTACATGAACGGGTGCAGCG
GGAAAAGGCTAATGGCACAACGTCCACGTAGGCATTACCCCAGCAAGGTGGTTATCCTAGGCTAAAACCTGGA
CAAAAGACTGTGAAAAGATCCTTGAACGGAAGCCAAATCTTGCCAAGTAGGAAAGGAAAAGGGCAAATACAAGGA
AGAAAACAATTGAGAAGATGCAGGAATAAAGTAATCTTATATACAAGCTTCGATTAAAACCTGAAAACAAAGAAAAA

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FIGURE 1592

GC GCGCGGCTCCGCTGGGAAGCGAGACCCGGGTGGCGGGACAAAGACTTGCTTCCCGGCCACGCGCGCTCGGCCGG
CCGTGGGGCGGGGCATAGGCGGTGACGTGATGTCGCGTATCGAGTCTCCGCCCTTCCCGCTCCCCGTATATA
AGACTTCGCGGAGCGCTCTCACTCGCACAAAGTGGAACCGGGGTGTTGGGTGCTAGTCGCGACCAAGGCGAAGGGTG
CGAGGACCAACGCGCGGCTCGGACGTGTGACCGCGCTAGGGGTGGCAGCGGGCAGTGC GGGGCGGCAAGGCGAC
CATGGAGCTTTTGGCGACTATCACCTACCAGCCAGCGCCAGCAAAAATGTGCGAGCAGGCGCTGGGCAAGGG
TTGCGGAGCGGACTCGAAGAAGCGGGCGCGCGCAGCCCCCGAGGAATCGCAGCCACCTCAGTCCCAGGCGCA
AGTGCCCCCGCGCGCCCTCAACCACATCACCACCATTGCGACTCGGGGCGGAGATCTCGCGGATTATCGTCTGA
CCCCAGACTGGGAAGCGCTACTGCCGGGCAAAAGTGTGGGAAAGGGTGGCTTTGCAAAATGTTACGAGATGAC
AGATTTGACAAATAACAAAGTCTACGCCGCAAAAATTATTCCTCAGCAGAGTAGCTAAACCTCATCAAGGGGA
AAAGATTGACAAAGAAATAGAGCTTCACAGAATTCTCATCATAAGCATGTAGTGCAGTTTTACCACTACTTCGA
GGACAAAGAAAAACATTACATTCTCTTGAATACTGCAGTAGAAGGTCAATGGCTCATATTTTGAAGCAAGAAA
GGTGTGTGACAGGCCAGAAGTTCGATACTACCTCAGGCAGATTGTGTCTGGACTGAAATACCTTCATGAACAAGA
AATCTTGGACAGAGATCTCAAACCTAGGGAACTTTTTTATTAATGAAGCCATGGAACATAAAGTTGGGGACTTCGG
TCTGGCAGCCAGGCTAGAACCCTTGGAACACAGAAGGAGAACGATATGGGTACCCCAAAATATCTCTCTCTCGA
AGTCTCTCAACAAACAGGACATGGCTGTGAATCAGACATTGGGCGCTGGGCTGTGTAATGTATACAATGTTACT
AGGGAGGCCCCATTTGAAACTACAAATCTCAAAGAACTTATAGGTGCATAAGGGAAGCAAGGTATACAATGCC
GTCCCTATTGCTGGCTCTGCCAAGCACTTAATTGCTAGTATGTTGTCCAAAAACCCAGAGAGATCGTCCAGTTT
GGATGACATCATTCGACATGACTTTTTTTTTCAGGGCTTCACTCCGACAGACTGCTTCTAGCTGTTTGTGATAC
AGTTCAGATTTCCTATTCAAGCCAGCTAAGAATTCCTTTAAGAAAGCAGCTGCTGCTCTTTTTTGGTGGCAA
AAAAGACAAAGCAAGATATATTGACACACATAATAGAGTGTCTAAAGAAGATGAAGACATCTACAAGCTTAGGCA
TGATTTGAAAAGACTTAATAACTCAGCAACCCAGCAAAACACAGGACAGATGAGGAGCTCCAGCCACCTACCAC
CACAGTTGCCAGGTCTGGAACACCCCGAGTAGAAAACAAGCAGCAGATTGGGGATGCTATTCCGATGATAGTCAG
AGGGACTCTTGGCAGCTGTAGCAGCAGCAGTGAATGCCTTGAAGACAGTACCATGGGAAGTGTTCGACACAGT
GGCAAGGGTCTTCGGGGATGTCTGGAACACATGCCGAAGCTGATTGCATTCCCAAAGACAGCTGAGCACATC
ATTTAGTGGGTCAACAAATGGGTGATTACTCTAACAAATATGGCTTGGGTACCAGCTCTCAGACCAACCGGT
CGGTGTCTTTTCAACAATGGTGCTCAGATGAGCTCTCTCCAGACAAAAAACAGTTCATATTACCGAGAGCT
TGGCCAATGCTCAGTTTTCCCGACCAAGATGCTCTTGAGCAATTTATAGTCAAGTGACGGTGTGAAATACTT
TTCTCATTACATGGAGGAGAACCTCATGGATGGTGGAGATCTGCCTAGTGTTACTGATATTCGAAGACCTCGGCT
CTACCTCCTCAGTGCGTAAAATCTGATAAGGCCCTAATGATGCTCTTTAATGATGGCACCTTCAGGTGAATTT
CTACCATGATCATACAAAAATCATCATCTGTAGCCAAAAATGAAGAATACCTTCTACCTACATCAATGAGGATAG
GATATCTACAACTTTTCAGGCTGACCACTCTGCTGATGTCTGGCTGTTTCATGATTAAGAAATCGAATGGAATA
TGCCCTGAACATGCTCTTACAAAGATGTAACGTAAAGACTTTTCGAATGGACCTATGGGACTCCTCTTTTCCAC
TGTGAGATCTACAGGGAACCCAAAAGAAATGATCTAGAGTATGTTGAAGAAGATGGACATGTGGTGGTACGAAAAA
AATTCCTCTGTGGCTGCTGCTGAGTGGGTGGAACAGCAACAGGCTAAGGCGATCTCTGACTTTGGCAATCC
AAGAGTGAAACCGAATGCAAGTTTTCCTTGAGATACCTGTTTTAAAGGTTTTTCAGACAAATTTGCAGAAAGGGT
CTTGATTCTTAATTTCTCTGTTTGAGAGCAATTCAGCCAGGAGACTTTGGAAGTGTGAATACTCTGTAATCTCTGAAG
GGGAGGGAGAAGGGAGGAAGCTCCCATGTTGTTTAAAGGCTGTAATTTGGAGCAGCTTTTGGCTGCGTAACGTGA
ACTATGGCCATATATAATTTTTTTCATTAAATTTTTGAAGATACTTGTGGCTGGAAGGAGTGCATTCCTTGTTAAT
AAACTTTTTATTTATTACAGCCCAAAGACAGCATTTATTATCAAAATGCTTTTTTTTTTATGTTGACCATTTTA
AACCCTTGGCAATAAAGAGTATGAAACGC

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FIGURE 1593

ATGGAAGGCATCACCGTGTACGGTCAACCAGAGCCTGCTGAAC TCCCTTAAGTGGAGATGGACTCCAGCATCC
AGGAGACCACACCCAGGAGAAGAACCAGATCAAGACACTCAACAACAAGTTTGCCCTCTTCATAGACAAGGTACA
GTTCTCTGGAGCAGCAGAACAGATGCTGGAGACCAACTGGAGCCTCCTGCAGCAGGAGAAAGATGGCTCGGAGCAA
CATGGACAACATGAGAAGCTGAAGCTGGAGGCGGAACCTGGCAACATGCAGGGGCTGCTGGAGGACTTCAAGAAC
AAGTATGAGGATGAGATCAATAAGCGTACAGGGATGGAGAATGAATTTTCCATCAAGAAGGATGTGGATAAA
GCTTACATGACAAGGCAGCTGTATGAAGAGGAGATCCAGGAGCTGCAGTCCCAGATCTCGGACACGTCGTGGTG
CTGTCCATGGACAACAGCCGCTCCCTGGACATACGTGGGGAGCTGGCCGATAAGGATGCCAACGCCAAGCTGTCT
GAGCTGGAGGCCGCCCTGCAGTGGACCAAGCAGGACATGGGCGGCAGCTGCCTGCTGGAGGGCGAGGAGAGCCGG
CTGGAGTCTGGGATGCAGAACATGAGTATCCGTACGAAGACCACCAGCGGCTATGCAGGTGGTCTGAGCTCGACC
TATGGGGGCCCTCAAGCCCCGGCCTCAGCTACGGCCTGGGCTCCAGTTTTGGCTCTGGTGCAGGCTCCTCGCGCT
TTCAGCCGACCTGCTCCATCAGGGCCATGATTGTGAAGAAGATTGAGACCCAGATGGGAAGCTGGTGTCCGAG
TCCTCTGACGTCTGTCTCAAGTGA

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FIGURE 1594

MEGITAVTVNQSLNLSNWRWTPASRRPFGPEEPDQDTQQQVCLLHRQGTVPGAAEQDAGDQLEPPAAGEDGSEQ
HGQHEKLEAEELGNMQGLED FKNKYEDEINKRTGMENEF FLIKKDVKAYMTRQLYEEEEIQELQSQISDTSVV
LSMDNSRSLDIRGELADKDANAKLSELAALQWTKQDMGGSC LLEGEESRLES GMQNMSIRTKTTSYGAGGLSST
YGGLTSPGLSYGLGSSFGSGAGSCAFSRTC SIRAMIVKKIETHDGKLVSESSDVLK

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FIGURE 1595

GTGAAGGAGGCATIGTTTTGGGAGGGGTTTTGCCCTCCTTCGATGCATTCCAGCCTTGGACTCATTGACTCCA
GCTAATGAAGATCAAAAAATTGGTATGGAAATTGTTAAAAGAACTCAAAATTCAGCAATGACCACTGCTACG
AATGCAGGTGTTGAAGGATCTTTGATAGTTGAGAAAATTATGCAAAATTCCTCAGAAGTTGGTTATGATGCTATG
GTTGGAGATTTTATGAATATGGTAGAAAAAGGAATTATTGACCCAACAAAGCTTGTGAGAACTGCTTTATTGGAT
GCTGCTGGTGTGGCCTCTCTGTTAACTACAGCAGAAGTTGTAGTCACAGAAATTCCTAAAGAAGAGAAGGACCCT
GGAATGGGTGCAATGGGTGGAATGGGAGGTGGTATGGGAGGTGGCATGTTCTAACTCCTAGACTAGTGCTTTACC
TTTATTAATGAACGTGTGACAGGAAGCCCAAGGCAGTGTTCCTACCAATAACTTCAGAGAAGTCAGTTGGAGAAA
ATGAAAAATATATAATGGTTTACTGCTGTCAATTGTCCATGCCTACAGATAATTTATTTGTATTTTGAATAAAA
AACATTTGTACATTCCTGATACTGGGTACAAGGCCATGTACCAATGTACTGCTT

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FIGURE 1596

ACCTGTCTCGCCGCGCGCATGCCCTGCAGCGCCCCACAGAAATGCTTCGGTTACCCACAGTCTTTGCGCCAGATG
AGACCAAGTGTCCAGGGTACTGGCTCCTCATCTCACTCGAGCTTATGCCAAAGATGTAAAATTGGTGCAGATGCC
CGAGCCTTAATGCTTCAAGGTGTAGACCTTTTAGCCGATGCTGTGGCCGTTACAATGGAGCCAAAGGGAAGAACA
GTGATTATTGAGCAGAGCTGGGGAAGTCCCAACGTAACAAAAGATGGTGTGACTGTTGCAAAAGTCAATTGACTTG
AAGGATAAATATAAAAAACATTGGAGCTAAACTTGTTCAAGATGTTGCCAATAACACAAATTGAAAAACGTATTCA
AGAAATCATTGGGCAGTTAGATGTCACAACCTAGTGAATATGAAAAGGAAAAACTGAATGAATGGCTGGCAAAACT
TTCAGATGGAGTAGTTGTGCTGAAGTTTGGTGGGACAAGTGATGTTGAAGTGAATGAAAAGAAAACAGAGTTAC
AGATGCCCTTAATGCTACAAGAGCTGCTGTTGAAGGAGGCATTGTTTTGGGAGGGGGTTTGCCCTCCTTCGATG
CATTCCAGCAATGACCACTGCTACGAATGCAGGTGTTGAAGGATCTTTGATAGTTGAGAAAATTATGCAAAATTC
CTCAGAAGTTGGTTATGATGCTATGGTTGGAGATT

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FIGURE 1597

CTCTGTCCCTCACTCGCCGCCGACACCTGTCTCGCCGCCGCATGCCCTGCAGCCGCCACAGAAATGCTTCG
GTTACCCACAGTCTTTCGCCAGATGAGACCAGTGTCCAGGGTACTGGCTCCTCATCTCACTCGAGCTTATGCCAA
AGATGTAAATTTGGTGAGATGCCGAGCCTTAATGCTTCAAGGTGTAGACCTTTTAGCCGATGCTGTGGCCGT
TACAATGGAGCCAAAGGGAAGAACAGTGATTATTGAGCAGAGCTGGGGAAGTCCCAACGTAAACAAAAGATGGTGT
GACTGTTGCAAGTCAATTGACTTGAAGGATAAATAAAAAACATTGGAGCTAAACTTGTTCAAGATGTTGCCAA
TAACACAAATGAAGAACTCTGGGGATGGCACTACCAGTGTCTACTGTACTGGCAGGCTCTATAGCCAAAGGAAGGCTT
CCAGAAGATTAGCAAAAGGTGCTAATCCAGTGGAAATCAGGAGAGGTGTGATGTTAGCTGTGATGCTGAATTGC
TGAACTTAAAAAGCAGTCTAAACCTGTGACCACCCCTGAAGAAATTGCACAGGTTGCTATGATTCTGCAAAATGG
AGACAAAGAAATTTGGCAATATCATCTCTGATGCAATGAAAAAGGTTGGAAGAAAGGGTGTATCACAGTAAAGGA
TGGAACAACTGAATGATGAATTAGAAATATTGAAGGCATGAAGTTTGATTGAGGGTATATTTCTCCATACTT
TATTAATACATCAAAAGGTGAGAAATGTGAATCCAGGATGCCTATGTTCTGTTGAGTGAAGAAAGAAATTTCTAG
TGTCAGTCCATTGTACCTGCTCTTGAAATTGCCAATGCTCACCATAAGCCTTTGGTGATAATCGCTGAAGATGT
TGATGGAGAAGCTCTAAGTACACTCATCTTGAATAGGCTAAAGGTTGGTCTTCAGGTTGTGGCAGTCAAGGCTCC
AGGGTTTGGTGACAATAGAAAGAACCACTTAAAGATATGGCTATTGCTACTGGTGGTGAGTGTGGGAGAAGA
GGGGTTGACCCCTGAATCTTGAAGATGTTGAGCCTCATGACTTAGGAAAAGTTGGAGAGGTCATTGTGACCAAGA
CGATGCCATGCTCTTAAAGGAAAAGGTGACAAGGCTCAACTTGAAAAACGTATTCAAGAAATCATTGGGCAGTT
AGATGTCACAACTAGTGAATATGAAAAGGAAAACTGAATGAATGGCTGGCAAACTTTGAGATGGAGTAGTTGT
GCTGAAGTTTGGTGGGACAAGTGATGTTGAAGTGAATGAAGGCAATTGTTTGGGAGGGGGTTTTGCCCTCCTTCG
ATGCATTCCAGCCTTGGACTCATTGACTCCAGCTAATGAAGAT

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FIGURE 1598

ACGAACAGGCCAATAAGGAGGGAGCAGTGC GGGGTTTAAATCTGAGGCTAGGCTGGCTCTTCTCGGCGTGCTGCG
GCGGAACGGCTGTTGGTTTCTGCTGGTTGTAGGTCTTGGCTGGTCGGGCTCCGGTGTCTGCTTCTCCCGCT
GAGCTGCTGCCCTGGTGAAGAGGAAGCCATCGCGCTCCGAGTCAACAGGAACTCGAAAATTAAATGCTGAAAAATAG
GCGAAGATCAACATGGCAGGCGCAAGCGCGTTCCTACGGCCCTGCTGCAACCTCCAAGCCGGACTGAGGCCA
AGAACAGCTCTTGGGGACATTGGTAACAAGTCAGTGAACAACCTGCAGGCCAAAATGCCTATGAAGAAGGAAGCA
AAACCTTCAGCTACTGGAAGATCATTGATAAAAACTACCAAAACCTCTTGAAAAGGTACCTATGCTGGTGCCA
GTGCCAGTGTCTGAGCCAGTGCCAGAGCCAGAACCTGAGCCAGAACCTGAGCCTGTTAAAGAAGAAAACTTTCTG
CCTGAGCCTATTTTGGTTGATACTGCCCTCCTCAAGCCCAATGGAAACATCTGGATGTGCCCTGCAGAGAAGAC
CTGTGTCAAGGCTTCTCTGATGTAATCTTGCAGTAAATGATGTGGATGCAGAAGATGGAGCTGATCCAAACCTT
TGTAAGTAATATGTGAAGATATTTATGCTTATCTGAGACAACCTTGAGGAAGAGCAAGCAGTCAGACCAAAATAC
CTACTGGTTCGGGAAGTCACTGGAAACATGAGAGCCATCCTAATTGACTGGCTAGTACAGGTTCAAATGAAATTC
AGGTGTGTGAGGAGACCATGTACATGACTGTCTCCATTATTGATCGGTTGATGCAGAATAATTGTGTGCCCAAG
AAGATGCTGCAGCTGGTTGGTGTCACTGCCATGTTTATTGCAAGCAAAATGAAGAAATGTACCCTCCAGAAAT
GGTGACTTTGCTTTTGTGACTGACAACACTTATACTAAGCACCAAAATCAGACAGATGGAAATGAAGATTCTAAGA
GCTTTAAACTTTGGCTCTGGTTCGGCTCTACCTTTGCACTTCCTTCGGAGAGCATCTAAGATTGGAGAGGTTGAT
GTCGAGCAACATACTTTGGCCAAATACCTGATGGAACATACTATGTTGGAATATGACATGGTGCACCTTCTCTCT
TCTCAAAATGCGACAGGAGCTTTTGTCTAGCACTGAAAATCTGGATAATGGTGAATGGACACCAACTCTACAA
CATTACCTGTCAATACTAGAAGATCTTCTTCCAGTTATGCAGCACCTGGCTAAGAAATGTAGTCATGGTAAAT
CAAGGACTTACAAAGCACATGACTGTCAAGAACAAGTATGCCACATCGAAGCATGCTAAGATCAGCACTCTACCA
CAGCTGAATCTGCACTAGTTCAAGATTAGCCAAAGGCTGTGGCAAAGGTGTAACTTGTAAACTTGAGTTGGAGT
ACTATATTTACAAATAAAATTGGCACCATGTGCCATCTGTAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAA
AAA

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FIGURE 1599

MALRVTRNSKINAENKAKINMAGAKRVPTAPAATSKPGLRPTALGDI GNKVSEQLQAKMPMKKEAKPSATGKVI
DKKLKPKLEKVPMLVPVPVSEPVPEPEPEPEPEPVKEEKLSPPEILVDTASPSMETSGCAPAEEDLCQAFSDVI
LAVNDVDAEDGADPNLCSEYVKDIYAYLRQLEEEQAVRPKYLLGREVTGNMRAILIDWLQVQMKFRLLQETMYM
TVSIIIDRFMQNNCVPKKMLQLVGVTAMFIASKYEEMYPPEIGDFAFVTDNTYTKHQIRQMEMKILRALNFGLRP
LPLHFLRRASKIGEVDVEQHTLAKYLMELTMLDMDYMHVFPFSQIAAGAFCLALKILDNGEWTPTLQHLYLSYTEES
LLPVMQHLAKNVVMVNQGLTKHMTVKNKYATSKHAKISTLPQLNSALVQDLAKAVAKV

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FIGURE 1600

GCTGGCAAGCGCTTCCTGCGCAGCGCCTAGGCGACCTGGAGTTTGTGACGCTGTGATGGTCTAGAGGCTGGAGAT
TCAAGATCTGGTGCCATCATTTCCTGGTTCTGTTGATGACCCCTCTCCAGGTTACATACAGCTTACATCTTGCA
TCCTCAAGCGTTTTCTTATAAGGCTAAAAATTCACAAAGCATATATCAATGAAATCAGGAGGATCTAGATCCGGA
TAGTACTACAGATGTGGGAGATGTTACAAATACTGAAGAAGAACTTATTAGAGAATGTGAAGAAATGTGGAAGA
TATGGAAGAATGTCAGAAATAAATTATCATTATTGGAACCTGAAACACTCACCGATTCAAATGCTCAGCTATCATT
GTTAATTTATGCAAGTAAATGTTTAAACCGCTGAACCTCAGTCAATGGCAGAAAAAACACCTGAAACAATTCCCTT
GACTGAAGACGTTCTCATAACATTAGGAAAAAGAGGTTCCAAAAGCTGAGACAAGATCTTGAAATGGTACTGTG
CACTAAGGAGTCAAAGAAATGAAAAGTTAAAGGAAGACTTAGAAAAGGGAACAACGGTGGTGGATGAACAGCAACA
GATAATGGAATCTCTTAATGTACTACACAGTGAATTGAAAAATAAGGTTGAAACATTTTCTGAATCAAGAACTCT
TAATGAACCTGAAAACATAAATGCTTAATATAAAAGAAATATAAGGAGAAACCTTGGTACCTTGGCGAGTTTCT
AGAAGACCATTTTCCCTGCTGCTGATAGAAGTGTAAAAAGAAAAAGAAAAACATTCAGAAATCATCTGTAAACCT
GATAACACTGCATGAAATGTTAGAGATCTTATAAATAGATTATTGATGTTCCACATGATCCATATGTCAAAAT
TAGTGATTCCCTTTGGCCACCTTATGTTGAGCTGCTGCTGCGTAATGGAATTGCCTTGAGACATCCAGAAGATCC
AACCCGAATAAGATTAGAAGCTTTCCATCAGTAAAGGATGTTTTCTTTTTTTCACACAGTAAAAATTCCTATCAT
TCAAGGATATTGGAACACAGGACTATTTGGATAAAAAACATTATTGCAAAATTAATGCGCATAGGCCATCTTAC
TTTTATTGCAAAATGGCATGTGCTGCCATCTATTATTCAITTTTAAATGGTCATTTCTTATTCAAGTGAGTGCTTT
AGTGTTTTAAACTATATGGATAAAGATGCAGGTAGATAATTTCTAGGCATAAAACATTTAATGTACCTTACCTC
ATGCAATATTCTTTGATTCTTTGTTGATTTATGATATTGCTAATATAAATTTTCTTAAAAATATATAACAATAT
CTTTTATGCAITTTGAGTTCAGCTGGTGCTTCTTTATATTAGAAATATAATGGGAAGGTCATTAAATTACAA
GATGGTTTTAAATTTAGGTAATATCTGAGGTGGCATAATTTAAAAATATTTAGCAAAATTTGTTTCATATATAC
GTCTTATTTCTAGATTGTTTAAAAATGGAATATGAAAACTAATGGATAAAGCTAGCATAAAAATTGATATTTTA
GTTTGATTATTAATATATCATGTTACCTTATATATTAATCTACTCTTGATTCTGCTAATTATTACCAACAAAT
TGATTTCATGACATTTTATTAATCCTCTGTGAATTTTCTGTAAATAAAATTTATTCTGAAATCTCT

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FIGURE 1601

MNQEDLDPDSTTDVGDVTNTEELIRECEEMWKDMEECQNKLSLIGTETLTDSNAQLSLLIMQVKCLTAELSQQWQ
KKTPTETIPLTEDVLITLGKEEFQKLRLQDLEMVLSTKESKNEKLKEDLEREQRWLDEQQQIMESLNLHSELKNKV
ETFSERIFNELKTKMLNIKEYKEKLLSTLGEFLEDHFFLPDRSVKKKKKNIQESSVNLITLHEMLEILINRLFD
VPHDPYVKISDSFWPPYVELLLRNGIALRHPEDPTRIRLEAFHQ

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FIGURE 1602

CCAGGAAGATGCGCGCGCGAGCGGAGGTGTGAGTGGAACGGGGAGCTCAGCGGCGGGATTTCCTCTCCCTCTCTT
TCCCTTTCTCTCCCTATTGTAAATTGGCATCTGAGGGGGCTAAGTTCTGGGTGGCAGCGCGGCGCAACGACGAGG
GTACGCGGCAAGCGCGCGCGGCTGACCGCTGGAAGGGTAGGCTTCATTACCGCTGCTCTCTCTCTCTGCTCT
GCTCGGTTGTACGCGCGCGCGCGCGCGCGCGCGCGAGCTTGCTCCCTCTCTCTGCTCCCCCCACACCGGAAGCGG
GCATCTTCTCGCTTGCCTATCCCCGACCTTCACCCGAGGAGTGGCGGCTCTCTCGCGCGAGCTTAGGAGGAGCG
GGGGCGGGTCTCTGCTCGGTGTGTGAGCCTCTCATGTCGGATAATCACAGACTGGAACCTCTGCTGGGCTCGGAGAGG
GATCCAGAGACGGAGTCTGGCCGCTGTGGAGCGCTGCGGGGCTTCAGTAAGTGGCAAACTACATCTATGGG
TGGCAGCACTCTTGGGTGATTTTGAAAATAATGCTCTGAGTTACTACAATTGAAGTGAAGAACAGAGTATGGC
TGCAGAGGATCCATCTCTGTTAGCAAGCGCTGTACATACACTCAGATTGTGATGAATGTGCATTGTGATTAAGT
GTAATGTAGATGTTTGGTATCTTCTGTGTCAGAGTCAGATACAGACAGCAATGGAATGATGATCCATTGAACAC
CACAAGACTGAATGTGATATGGATCGAATCAGCTGAGCTGCGTCACATGGCTCAATGGTGTCCCTGGGTGCTGGA
CGAAGTGCCTACTCTGCAACATCCACCCTCTTATTCAAGAAGAGCCACAGTTTACGTGCGAAGTGTGCTGAAGT
GAAACATTTAGAGACATCTTATGTAGACAAGTTGACAGCGCTACAGAGACTTATGATGCTGCTGTGCTGATGCTGT
CTAAGGATGAACTTCAAAGGGATAAAGTGTTGAGAAGTATGATAAGAATGACTTCCCTACACCGGCTTCTGTATGT
GACTTCTTGCAATGCAACCGGCATAGGAAAAAGGATTATTCACAGCTGACACCAAAGGAATTAATGGTATA
GACTTTAAAGGGAGGCGATAAATCTTTAAAGCACTACTCTGCGAATCTCTGCAACACTTCTCATTTGATTGA
CTAATGGTTAAAGCTGAGGACAGCTGGCGACAAGAGTCCGATAGAAGAACTGAGAAGAAAGAGCAAGGAA
GCATATAAAAAATGCAATGACAGAACTTAAGAAAAATTCGCACTTTGGAGGACAGATTATGAGAAGAGCCCTAAC
AGTCTGATTATAGAAGAGAGTTCTTTGATGTGTTGAGCTGTCTTGAGAGACAGAGATAAAATAGAGAAACAG
TCACAGAGTAAAAGGTAGATTACATTGGCTCTACCTGCTCCCTTGACAGTGCCTTTTCTTGTGGGGACA
CATAGATTGTGCTAAAAGCTCTAATGTGCTTCTCTCCATGCTCTTCATGATCATGTAGTCAGGCTCTGATGAT
GTTACAGAGTACGCTCCAGGTTGAAGAGATGGTCAGAACCACTACGATTACTCTACAGGATGTAGCGCG
GATGCGAATTGGCAGTTGGTTGTAGAAGAGGGAGAAATGAAGGTATACAGAGAGAGATGAGAAGAAATGGGATT
GTCTGGATCTCTTAAAGCTACCACTACCTGAGTTAAGGCGTACAGGACATGAGTCTGCAATATTCTGGAAT
GTTGCACTTGCAATGACTGGGAACAATCATAGAAAACCTTCATGGTGGAAACATAGCTGATATGCAATC
ATCAATTTCAAACCAACAGAGGGGCTGGCGCTGCTCTCAGCGACAGCATATTAATCTTGTGCTGATCGAAAG
ATACAGCCTTGACGTAAGTAGACCTTGAACCTTGGATGATTGTGAATTTCTGTGGATCATGACAGTGGCTCT
CTAAACACCGATGTGCTGTCGCAAAATATATGCTGCTATGATTGTCTCAAACCTTGGTAGCCGCCACGAGGGA
ACACCGAAATTAGCAGGAGCAACATTAATGTGAAGATTACATGTAGCTAATGTGAACCTCGGAGATGGGCA
CAGGCTCAGTTGTAGGCGGAGTGGCAAGCGAGAGTATCTAAATTTCAAAGCTTTTACTCTTACGCTCCA
GAAAAAATCGCAGGAAGCCTATTGTGCTAGTATACAGAGTACAGAGATGTTTATCTTTTCTTTTAACT
TATTTGACTAATCTGACTGTCAATCAATAAATTTAGTTGTGGAAGATTACTTACTATGTTTTT

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FIGURE 1603

MSDNQSWNSSGSEEDPETESGPPVERCGVLSKWTNYIHGWQDRWVVLKNNALSYKSEDETEYGCGRSICLSKAV
ITPHDFDECRFDISVNDVWVYLAQDPDHRQQWIDAEQHKTESGYGSESSLRRHGSMVSLVSGASGYSATSTSS
FKKGHSLREKLAEMETFRDILCRQVDTLQKYFDACADAVSKDELQRDKVVEDDEDDFPTRSDGDFLHSTNGNKE
KLFPHVTPKGINGIDFKGEAIFTKATTAGILATLSHCIELMVKREDQKRLDKETEKRRTEEAYKNAMTELKK
KSHFGGPDYEEGPNLINEEEFFDAVEAALDRQDKIEEQSQSEKVRHLHWPISLPSGDAPSSVVGTHRFVQKPYRS
SSMSSIDLVSASDDVHRFSSQVEEMVQNHMTYSLQDVGGDANWQLVVEEGEMKVYRREVEENGIVLDPLKATHAV
KGVIGHEVCNYFWNVDRNDWETTIENFHVVELADNAIIYQTHKRVWPASQRDVLYLSVIRKIPALTENDPET
WIVCNFSDHDSAPLNNRCVRAKINVAMICQTLVSPPEGNQEI SRDNILCKITYVANVNPGGWAPASVLRVAVAKR
EYPKFLKRFTSYVQEKTAGKPILF

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FIGURE 1604

AGTACAATCTGCTGCCAGGACCTGGACATTGACAGATAAAATGAAGTGGGTCA GTTAACTACAGAGGGAAGAAT
ATGAAGAACTGCTTCATTATGCTATAGTGACTCCAAATATTGAACCCGTGCTTCACAGTCATCTCATCCTAAGG
GAGAATTTGGTGCCAGATGTCAGAATTTCTACAATTCATGATATTCTTCATAGTCAAGGAAATAACTCTGAAGTAA
GAGAACTGCAATAGAAGTTGGAAGGATGTGATTCCATATTTCAAGTCATTCAAAGACAGATGCTACAACCT
TTCTTTTATTTCAGAGTCATCACCAGTGTATCGCCAAGGAAGCCTTCTCACCAGTCATGGATTTTTTCAGTTCA
CATCTTTAGCTGACTCTTCTCACCAGCAACAATTCATGTCATACAGATGCCCATGAAATACTTGTGAGCGAT
TTCTTTGTTTCTGATGAAAACCTTCAGAAGATGGAATGTGCTTGATCTTTGGAGTTTCAGGCTCTTAAGACAAAC
AATCATATCTGAACCTAAGTAAATGGAGACTTAATTTTATTGACTGGCACCGAATGGAAATGAGAAAAAGAGAAAGAA
AAACATGTCAGCACATTTAAAACAACTGTGTAATCAGATCAATGAATTGAAGGAGCTGCAAAAAACCTTTGAATC
TCCATTGGGAGAAAAATGAGGTGATTTCTAGCTTGCTCATGCCATAGGCAAGCAAAAGGAAAGATAGAGTTG
ATGAGAACATTTCTCCACTGGCGAATCGGCCATGTCAGAGCCAGACAGGATGTTTATGAAGGTAAACTAGCTGAC
CAGTACTACCAGAGAACTTTACTGAAGAAAGTCTGGAAAGTCTGGCGTTCCGTAGTGCAAAAGCAGTGGAAGAT
GTGGTAGAAAGAGCTTGTCAAGCAAGAGCTGAAGAAGTTTGATCCAGATTTCCAATGATTATGAAGCCAAAGTT
GCTATGTTATCTGGAGCTTTGGAAGTGAAGCTGAGATTCAAAGAATGCAACATGAAAAGAGCACTTTTGAA
GATTCATGAAAAAAGCTTTTCATGAGGGGTGATGTGCATTAAATCTTGAAGCCATGACTATATTTCAAAACAGA
AATGATGCAGCTCTCCGATGCCCTTACCAGTTACATCACCCTGCTGCCATCCCCACCAGCCGCCGTGCGAGGA
GCCAGCGGACTGCCGTTGCCCTCAGCTGCTTCGATGACTTCTACCAGGGCTGCTTCCGCATCTCTGTTCACGTT
CCTGTTTCTGCTCTTGGTGAGGATCTGCAGCTACTGCTGCATCAGAAGAAATGTATGTGCCAAGATTTGTAACC
TCTGCACAACAGAAAGCAGGAAGAATATTACAGCCCGGATCACAGGAAGATGTGATTTTGCTTCAAAAAATAGA
ATTAGCAGCAGTTTAGCTATAATGGGAGTTTCTCCTCCCATGAGCTCAGTTGTTGTGGAAAAACATCATCCAGTC
ACAGTGCAAAACCAATCTCAAGCAACTGCAGCAAAATATCCCCGGACCATTATCCTGAAAGTAGTACCTCAGCT
TCCAGATCACTTGAACCATGATCAGCTCACCCAGTCTCTACAAGTGTTTCATCCATAAAAGTGGTTGACTAA
AGTGAATATGTCATAGTGGGTCTTTTAAATCCCCTGCTGTACCAAGGGTTAGAAGTCCTTTGGTTTAACTT
TTCCATATTGTTAGAACATCATGGAGACATCATGTTCTGTTCAAAATTACAAGAGGCTTTTTCAAGCTCTAC
CATGCTTTGTAACTATATGTAGAAATATTTTAAATGTTATTTTTATTTAAGCAATTAAAGTAAACCTTTTTTAAA
TT

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FIGURE 1605

MSSDEEKYSLFVVQNDSSRGSSVSSNLQEEYEELLHYAIVTPNIEPCASQSSHPKGEVLPDVRISTIHDILHSQG
NNSDEVRETAIEVGKGCDFHISSHSKTDESSPVLSPRKPSHPVMDFFSSHLLADSSSPATNSSHTDAHEILVSDFL
VSDENLQKMENVLDLWSSGLKTNIISELSKWRLNFDWHRMEMRKEKEKHAHLKQLCNQINELKELQKTFEISI
GRKDEVISSSLHAIGKQKEKIELMRTFFHWRIGHVRAQDVYEGKLADQYYQRTLLKKVWVWRSVVQKQWKDVV
ERACQARAEVCIQISNDYEAKVAMLSGALENAKAEIQRMQHEKEHFEDSMKKAFMRGVCAINLEAMTIFQNRND
AGIDSTNNKKEEYGPVQGKEHSAHLDPSPMP LPVTSP LLPSPPAVGGASATAVP SAASMTSTRAASASSVH
VPVSALGAGSAATAASEEMYVPRVVTSAQQKAGRITITARTGRCDFASKNRISSSLAIMGVSPPMSSVVVEKHHF
VTVQTI PQATAAKYPTIHPESSTSASRSLGTRSHTQSLTSVHSIKVV D

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FIGURE 1606

ATGGAGGGTCGTGGCTATGCCAAGGAGGGACTAAAAGATCTGGCCACCAGGACACCCAGAACTCCTAAGAAGAAA
TTAACATCTTGTGAGCAGCCCTTTGGCTGTGAAAATGCAAATGACTCAGACTGGCTGCCAAGAGTCACCTGTGAA
GCTCAACTGGCAGGACTCAGGGCTGAGCTCCATTCTTAACCTCCATCCATACAGCCAAACAAGCAGAACAC
AGGTTGCGCCCAAGGGTTCTGAACCCAGGATGTATAAGAAGATGGCCAGCAGAGCTCACCGGATGCGGCCAG
AACCGCAGCGCTTCCAAGGCACGGGCCCTCTCTCGGGGCGAACCCATTCCAGGGCGCCCTGCCCTTACAAAG
AAAAGAGAAGCTCTCCCGGGGCTCCGCGGGCTCTCCGGGATCGGTACGTTTCCCAGAATTAAACAGAAAAAG
CCTGGGAGTGGGCAAGTTGGCAAAGGAAGAGAGGCTGTTTGGCTGTGACATGTGGTGGAGGGTCATAAAGGC
CAGGTGGGAATGGCAGTGTCCGGCTGAGGGAAGGAGCTGCCACACTGCCTGATCATTGCGTGGCAGCAGCGGG
GAGGAGATCGGCAGCACCTTTGGCCACAGAGCTGCGCCTCTGTCAAAACAGGCAGCGCTGCAGGCGGCCAGAGA
TCCACTTCCACAGATTCTCGTGGCCAGGCAGGGGTGTGTTGTGGTGGGCAGACTGGCCAGGCGACCTTGGCCCA
CCATCACCTCTCTTACAGCCAGATGCGTTCTCGGGGCCAGGCTGCACCGGTTTCTTCTCCGCGATCAG
AAGGCCAATGTGACCTGCTCCTGAGGGGGGCTCCGAGCGACAGCGGCTGCTGCCTCGGGCTCTGGCCTGCTGG
GGGCTGGGCGCAGCGCGGGCGGAGAGGGCTCGGCAGTTCAAAAGCGCTGAGGCCAGCTCTCTGAGGGTGTG
CGGGGGTCTCTGCTGAGCGAGGCTGATGTGCGGGCTCTGGGAGGCTGGCTTGCGACCTGCCTGGGCGCTTTGTG
GCCAGTCGGCCGAAGTGCTGTACCCCGGCTGAGGACTGCCATCAGGCTACAAGGCCACTTTGCCACAACAGGC
AGAAAACAAGGAACACTTGGGAATTACATCTCCTTGTTTGGCCCTTAGACAATGATCAACTGTATTGGAATAT
GAAACCCAGCTCCCTGGCCTGAGTCTGATCAAATCTCAGGATTTTAAAAACCTCAGTGGACAAAAGTCTACT
CACGCTGCTTTGGTAGAATTGGACATAGCCAAGGAGCTCATCAGAAAAGGAGCTGCTAGTCACAGGCAGCAACA
ACCCACCTCCACACAGGATCCACTGTGGGGCTGCAATAACTGCTCCTTCTCTGAGTGATACAGGACATTCTGAG
GAAAAGTGGCTGGTGGATGGGCAGTATGTAATGACACAAGCTCATGAGTACAAGCTGAGACATGATGGGAGTCTA
CGGGTCCCATCTACACAGCTTGTATGCAGCTCTTCCAATTAAATGGCCAGTGTCTGGCTGAACATTATTATAG

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FIGURE 1607

MEGRGYAKEGLKDLATRTPTPKKKLTSCEQFFGCENANDSDWLPRVTCEAQLAQDSGLSSILNSPSHTAKQAEH
RLRPRVLNPGCIKKMGQRELTGCRQNRDAFQGTGPSLGANPFQALPFTKKRELSPGLPPASPGSVTFPRIKQKK
PGSGQVGKRRGLFGCDMMVEGHKGQVGNQSVRLREGAATLPDHSRGSSGEEIGSTFGHRAAPLSQTRTAIRLQG
HFATTGRKQGTGLNLHLVWPLDNDQLVLEYETQLPGLSLIKLSGFLKTLGQKSTHAALVELDIAKELIRKGAA
SHRQQQTHLHTGIHCGAAITAPSLSDTGHSEKWLVDGQYVMTQAHEYKLRHDSLRVPSQLDAALP INQCCLA
ELL

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FIGURE 1608

GGGGCGCACAGAGCCAGAGGGGCTTGCAGAGCGGGCGGTGAGGGACCGGGGAGGGGGCGCGAGCGGCTCCAGC
GCAGAGACTCTCACTGCAGCGCCGAGGGGCGCCCTTCTCGCTCGCGCCCGGGCAGCCGCGCGCCCACTGCCGCC
CGCGCCCGCTAACCGCCCGCACACAGCGCTCGCGAGGGTGCCTTGGACCCCTGATCTTACCCCGTGGGCAACCTTG
CGCTCTGCCTGCCGCAAGACCGCTCCCGACCGCGAGAAGTCAGGAGAGAGGGGTGAAGCGGGAGCGCCGAGG
CGGGGCGACCTCTCGGAGCAGCGCCGCGCAGAGCCCGGACAATGGGCGCGCGCGCTGCTGCTGGTGGCGGCC
TGCTTCACTCTGTGGCGCCCGCTGTGTCTGCCCGCGGGCCCGCGAGCCAGCAATCAAAGCAACAAATGCC
ACCTTAGATCCCCGGTCATTTCTCTCAGGAACCCCAATGATAAATATGAACCAATTTGGGAGGATGAGGAGAAAA
AATGAAAGTGGGTAACTGAATACAGATTAGTCTCCATCAATAAAAGCAGTCTCTTCAAAAACAACCTTCTGCA
TTCATCTCAGAAGATGCCCTCCGGATATTTGACCAGCTCCTGGCTGACACTCTTTGTCCCATCTGTGTACACCGGA
GTGTTTGTAGTCAGCTCCCACTAAACATCATGGCCATCGTTGTGTTCACTCTGAAAATGAAGGTCAAGAAGCCG
GCGGTGGTGTACATGCTGCACCTGGCCACGGCAGATGTGCTGTTTGTCTGTGCTCCCTTTAAGATCAGCTAT
TACTTTTCCGGCAGTGTATGGCAGTTTGGGTCTGAATTGTGTGCTTCTGCTCACTGCAGCACTTTACTGTAAACAT
TACGCCCTCTATCTTGCTCATGACATCATAAGCAITGACCGTTTCTGGCTGTGGTGTATCCCATGCAGTCCCTC
TCTGGCGTACTCTGGGAAGGGCTTCTTCACTTGTCTGGCCATCTGGGCTTTGGCCATCTGCAGGGGTAGTGCTCT
CTGCTCCTCAAGGAGCAACCACTCAAGGTGCCCGGGCTCAACATCACTACCTGTATGATGTGCTCAATGAAC
CTGCTCGAAGGCTACTATGCTACTCTCTCGCTCTCTTTTGTGCGCGTGTATCTTCTGCTCACTTCTTCC
ACGGCTCTGTTATGTGCTCATCATTCGATGTCTTAGCTCTTCCGAGTTGCCAACCGCAGGAAGAAGTCCCGGGCT
TTGTTCTGCTCAGCTGCTGTTTCTGCATCTTCATCACTTTGCTTCGAGCCCAACAACTCTCTGATTGGCGAT
TACTCACTTCTTCTCACACTTCCACCAAGAGGCTGCTCACTTGTGCTACCTTCTGTGCTGTGTCAGCAGC
ATAAGCTGCTGCATCGACCCCTAATTACTATTACGCTTCTCTGAGTGCCAGAGGTACGCTCTACAGTATCTTA
TGTCTGCAAGAAAGTTCGAGTCCGACAGTTATAACAGCAGTGGGCGAGTTGATGGCAAGTAAATGATACCTGC
TCTAGTAACCTGAATAACAGCATATACAAAAAGCTGTAACTTAGGAAAAGGGCACTGTGCGGAGGTAAAAAGAA
AAGTTTATAAAAGTGAATAACCTGAGGATCTATTAGTCCCAACCAACCTTTATGTGATCACTCTCAAAAACAA
CAGATGTACGACTTGATACCTTGCTTTTATGGGAGCTGTCAAGCATGTATTTTGTCAATTACCAGAAAGATAA
CAGGACGAGATGACGGTGTATTCCAAAGGGAATATTGCCAATGCTACAGTAATAAATGAATGTCACTTTCTGGATA
TAGCTAGGTGACATATACATACTTACATGTGTGTATATGTAGATGTATGCACACATATATTTTGCAGTGCA
GTATAGAATAGGCACCTTAAAAACACTCTTCCCGCCACCCAGCAATATGAAAAATATCTCTGATTCCCTGATT
TAATATGCAAGTCTAGGTTGGTAGAGTTTAGCCCTGAACATTTTATGGTGTTCATCAACAGTGAGAGCTCCAT
AGTTTGGGCTTGTACCACTTTTGAATAAAGTGATTTTGAATTTGTTGACGCAAGGTTAAGTTATTAAAGAG
GTAAGACTTAGTACTATCTGTGCGTAGAAGTTCTAGTGTTTTCAATTTTAAACATATCCAAAGTTGAATTTCTAA
AATTTAGGAACAGATGAAGGCTCTGTTTGTATAGGAGTATTTTTTACATTTTACACACTGTACACATAA
GCCAAAACCTGAGCATAACTCTCTAGTGAATGTAGGCTGGCTTTCAGAGTAGGCTATTCTGAGAGCTGCATGTG
TCCGCCCCGATGGAGGACTCCAGGCAGCAGACATGCGAGGGCCATGTCAAGACAGAGTTGGCCAGAAACCTT
CCTGCTAGGCTCAGACCTGAGCACTGGGGCCACTACTTGTCTCAATCTTCCGGGATGGCTGTGAAGTAT
CATGTTTATGAGAACTGGCAAGCAGAAATGTGATCTCCTAGGAGGTAAAGCAATGAAAGACTTTCTTCACTGCT
CTTAAAAACAACGAAAGGACCTGAGCACTTCTGATGCCATCCACTGGGTGTAAACACACTCTAGTATGTTTCT
GAAATGTGAGTTCTGATATGGAAAGCAACCTTATGCGCTGTGGCCACTCCAATAGGTGCTGAGTGTACAGAGTGG
AATAGACAGAGACCTGCCCTCAAGAGCAAGTAGATCATGATAGAGTGTGATGTATGTGTAATAAATATGTTT
CACACAAACAGAGCTGTCACTGCAAAAGTGTGACATTTTGAACATTTTGGGTTACTATTTTGTGGTTTAACTGAA
AACAATGCACTACAGGACATATATTTTAAATAAGTCTGATTTAATGGGCACTATTTATTTACAAATGTTT
GCTCAATAGATTGCTCAAACTCAGGTTTCTTTTAAAGATCAATCATGTCACTGCTGCTGATAAATAACAGAGAA
ATAGAAATTGACATTTGAATCTAGGAAATATTTCTATAAATTTTCCATTTACTCTTAAGACTTAAATGAGACTTTAAAG
CATTTTAACTCTCTTAAGTATCAAGTATAGAAAAATCTCATGGAATTCACAAAGTAAATTTGAAATTAGGTTGA
AACATATCTTATCTTACGAAAAAATGGTAGCATTTTAAACAAAAATGAAGTGCAGAGCAAGTGTATTTATTA
AAAGAGCAGGCCAGGCGGGTGGCTCAGCCTGTAATCCAGCACTTTGGGAGGCTGAGGCGGGTGGATCCAGAG
GTACAGGAGATCGAGACCATCTGGCTAACACCGGTGAACCCGCTCTACTAAAAATGCAAAAAATAGCCGGG
CGTGGTGGCAGCACTGTGATGCTCCAGCTACCTGGGAGGCTGAGCAGGAGACTGGCGTGACCCAGGAGGCGGA
CCTGTAGTAGCGCAGATTCGCGCACTGTGCTCCAGCTGGGCAACAGAGCAAGACTCCATCTC

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FIGURE 1609

GAAGAGCGAGAACGACCCCCGGTCCGACCAAAGCCGCGCGCCGCTGCGTCCGCGTCCAGCACCTATGTCCCG
CTGCCGTCGCTGCCGCCACCATGCCAAGAGAAAGGCTGAAGGGGATGCTAAGGGAGATAAAGCCAAGGTGAAGG
ACGAACCACAGAGAAGATCCGCGAGGTTGTCTGCTAAACCTGCTCCTCCAAAGCCAGAGCCACGCCTAAAAGGC
CCCTGCCAAAGAGGGAGAGAAGGTACCCAAAGGGAAGGGAAGCTGATGCTGGCAAGGAGGGAAATAACCC
TGCAGGAAATGGAGATGCCAAAAACAGACCAGGCGCAGAAAGCTGAAGGTGCTGGAGATGCCAAGTGAAGTGTGTG
CATTTTGTATAACTGTGTACTTCTGGTGACTGTACAGTTTGAATATACTATTTTTATCAAGTTTTATAAAATGC
AGAATTTGTGTTTTATTTATTTATTTTAAAAAGCTATGTTGTAGCACATAGAACACTTCATTGTTGTTTT
GGGGGAAGGGCATATGTCGCTAATAGAATGTCTCCAAAGCTGGATTGATGTGGAGGATTCCCTGACTTTGACAC
ACATGGCCACCTTGGCACAAAAGCCTTGTGGTATAGAAAAACAATT

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FIGURE 1610

GGCGAGAACGACCCCCGGTCCGACCAAGCCCGCGCGCGCTGCGTCCCGCGTCCAGCACCTAIGTCCCGCTGCC
GTCGCTGCCGCCACCATGCCCAAGAGAAAGGCTGAAGGGGATGCTAAGGGAGATAAAGCCAAGTGAAGGACGAA
CCACAGAGAAGATCCGCGAGGTGTCTGCTAAACCTGCTCCTCCAAAGCCAGAGCCCACGCCCTAAAAGGCCCTG
CAAAGAAGGGAGAGAAGGTACCCAAAGGGAAAAAGGAAAAGCTGATGCTGGCGAGGAGGGATTCCCTGACTTG
ACACACATGGCCACCTTGGCACAAAAGCCTTGTGGTATAGAAAAACAAATTGTGTTTTATGTCTCGTCTCCCTT
TCCCTCTTTAGCATAGACTTAACCTCCCTTAAGCCCAGACATCTGTTGGGACCTGACCCCTAGTCATTGGTTACC
AGTGTGTTAGGCAATCTGGACTTTCCAGTGATGCCACTGAGATGGCACCTGTCAAAGAGCAGTGGTTCTGTTTC
TAGATTATGGATCTTCAGATAAATTCTGCCATTTTCATTTAACTTCCTGAAAGTCAGGGTCGGCTTGTGAAAAGT
TGTTAAACAACATGCTAAATGTGAAATGTCAACCCCTCACTCTAAACTTTCCTGTTCAGAGCATCAGATGAAGAC
TTCATTGGGTTTTATAGTGGCTTTCTGATTTTTTGGTAGTCCATTGAAGAAGGGAGTTTGAAAGTTGTTGTATACT
GTTAACGATTGCTGCCCATGTCTCGCTGAAATACCA

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FIGURE 1611

GGGAGATAAAGCCAAGGTGAAGGACGAACACAGAGAAGATCCGCGAGGTTGCTGCTAAACCTGCTCCTCCAAA
GCCAGAGCCCCACGCCTAAAAGGCCCTGCAAGAAGGGAGAGAAGGTACCCAAAGGGAAGGAAAAAGCTGAT
GCTGGCAAGGAGGGAAATAACCTGCAGGAAATGGAGATGCCAAAACAGACCAGGCGCAGAAAAGCTGAAGGTGCT
GGAGATGCCAAGTGAAGTGTGTGCATTTTGTATACTGTGTACTTCTGGTGACTGTACAGTTTGAATACTATTT
TTTATCAAGTTTTATAAAAAATGCAGAAATTTGTTTTATTTTATTTTATTTTAAAGCTATGTTGTTAGCACA
TAGAACACTTCATTGTTGTTTTTGGGGAAGGGGCATATGTCGCTAATAGAAATGTCTCCAAAGCTGGATTGATGT
GGAGAAAACACCTTTCCCTTCTAGTTTGTAGAGACTTCCCTTTGGCTTCCAGGAGGAGGGATTCCCTGACTTTGA
CACACATGGCCACCTTGGCACAAAAGCCTTGTGGTATAGAAAAAATCCCTTAAGCCCAGACATCTGTTGGGACC
TGACCCCTAGTCATTGGTTACAGTGTGTTAGGCAATCTGGACTTCCAGTGATGCCACTGAGATGGCACCT

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FIGURE 1612

AAACCTCGCCAGATTACGGCGTGTAAACCAGCCGGAGCGGCGCGGACGGCAGGACCGCGGTGGCGCCTAGAG
TAGCGACCCGCGGGGAGCACGGGGCGACGCTGGCTGCAGAGACCCGGTGACAGCTGTATGCTTGAAATCTTGGAT
ACTGCAGGAACGGAGCAATTTACAGCAATGAGGGATTATACATGAAAAATGGACAAGGGTTTGCAATTAGTTTAT
TCCATCACAGCACAGTCCACATTAAACGATTACAAGACCTGAGAGAACAGATTCTTCGAGTTAAAGACACTGAT
GATGTTCCAATGATTCTTGTTGGTAATAAGTGTGACTTGGAAGATGAAAGAGTTGTAGGGAAGGAAACAAGGTCAA
AATCTAGCAAGACAATGGAACAACGTGCAATCTTAGAATCTTCTGCAAAATCAAAAATAAATGTTAATGAGATC
TTTTATGACCTAGTGC GGCAAATTAAACAGAAAACTCCAGTGCCTGGGAAGGCTCGCAAAAAGTCATCATGTGAG
CTGCTTTAATATACTAAATGCATTGTAGCTCTGAGCCAGGCTCTGAAGAACTGTTGCCAATCAACAGTGCCAGC
ATTCCAACTTTGTTAAACCTACCAACATCTTAAATGGACTTCCGTGTGGTGGTACCCTTTAAAGAGGCGGATGAAA
GCTACTATATCAGTTTGACACATTCTAATCACTTCCAGTATCACAAAGAGAGATTTTACTTATATAATAGTCCTA
GAGTATGCAGCTGGTAAAACAGAGGCTACATCCAGTATTACTGCTAAGAGACATTCTTCATCCCAATGTTGT
ACATGTATGAAATGGTGTACTGTATACTTTAATCATGCCCATACTTTGTATTGGAGAGTACAATAATGTAAATC
CTAAAAGCACCACTATTTTAGCATAATAAAGAAAGTCCAAAGAGCTCCTATATAGACTACTCCAGATAAATTCG
CTTCTTTGATACTGTAGCTTATTGTAATTTTTTTTAAAGAAATCAAGGTCAATTATTATTGTACAAAATAAGCGC
TTTGATTAAACAGCTATATAGTTTTTTTAAATTTTTAAATGTCTTAGATTAAAGAGCTTGCCCTTTAATATCTGTTG
GGAAGGAAATGTCCAGACTTTTCAAATCTCTTATTATATGTTTCCTTTTTTTGTTTACATAGGGAAACAATGTTTA
TAGTCGTGTGTACAGTGGGGGTCTACAACAAGAGTGTATATT

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FIGURE 1613

MREYKLVVLGSRGVGKSALT VQFVQGIFVEKYDPTIEDSYREQVEVDAQQCML EILD TAGTEQFTAMRDLYMKNG
QGFALVYSIT AQSTFNDLQDLREQILRVKDTDDIFYDLVRQINRKTPVPGKARKKSSCQLL

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FIGURE 1614

TTGGAGCAGGCCTGCTGCCTTCATGTCCACTCTCCTCATCAATCAGCCCCAGTATGCATGGCTGAAAGAGGTGGG
GCTCCGAGAGGAAAAATGAGGCGTGTATAATGGAAGCTGGGAGGCCGGGGAGAGGTTATTATGACCTGTTGCTC
TGCTAACAACTAGCCAAATAGCAAGAGTCCGACAGGCCAGTGTGGCAGACTATGAAGAACTGTAAAGAAAGCAAC
AGAAGCATGGAAAACTCTGGGCAGATATTCTTGCTCCAAAACGAGGAGAAATAGTAAGACAGATTGACGATGCCTT
GTGGGAGAAGATCCAAGTACTAGGAAGCTTGGTGTCTTTGGAGATGGGGAAAACTTTAGTGGGAAGGTGTGGGTGA
AGTTTCAGGAGTATGTGGATATCTGTGACTATGCTGTGTTTATCAAGGATGATTGGAGGACCTATCTTGCCCTTC
TGAAAGACCTGGCCATGCACTGATTGAGCAGTGGAATCCTGTAGGCCTGGTTGGAATCATCAGGCCATTCAATTT
CCCTGTGGCAGTGTATGGTTGGAAACAACGCCATTGTCTATGATCTGTGGAAATGCTGCCTCTGGAAAGGAGCTCC
AACCACCTTCCCTCATTAGTGTGGCTGTCAAAAGATAATAGCCAAGGTTCTGGAGGACAAACAGCTGCTTGGTGC
AATTTGTTCCTTGACTTGTGGTGGAGCAGATACCGGCACAGCAATGGCCAAAGATGAACGAGTGAACCTGCTGTC
CTTCACCGGGAGCACTCAGGTGGGAAAAACAGATGGCCCTGATGGTGCAGGAGAGGTTTGGGAGAAGTTTGTGGGA
ACTTGGAGGAAACAGTACCATTATTGCCTTTGAAGATGCAGACCTCAGCTTAGTTGTTCCATCAGCTCTCTTCAC
TGCTGTGGGAATAGCTGGCCAGAGGTGTACCACTGCGAGCGCACTGTTGTACATGAAGCATCCATCATGAGGT
TGTAACACAGACTTAAAAAGGCTTACGCACAGATCCGAGTTGGGAACCCATGGGACCCCTAATGTTCTCTATGGGCC
ACTCCACACCAAGCAGGCAGTGAGCATGTTTCTTGGAGCAGCGGAAGAAGCAAAGAAAGGATGACACAGTGGT
CTATGGGGGCAAGGTTATGGATCGCCCTGGAAATATGTAGAACCACAAATGTGACAGGTCTTGCCACAGATGC
ATCCATTGCACACACAGAGACTTTTGCTCCGATTCTGTATGCTTTTAAATTCAGAAATGAAGAAGAGGTCTTTGC
ATGGAATACTGAAGTAAACAGAGACTTTCAAGTAGCAACTTTACCAAGATCTGGGCAGAACTTTTCGCTGGCT
TGGACCTAAAGGATCAGACTGTGGCACTGTAAATGTCAACATTTCCAACAAGTGGGGCTGAGATTGGAGGTGCCTT
TGGAGGAGAAAAAGCACACTGGTGGTGGCAGGGAATCTGGCAGTGATGCCTGGAAACAGTACATGAGAAGGTCTAC
TTGTACTATCAACTACAGTAAAGACTTTCTCTGGCCCAAGGAATCAAGTTTCAGTAAAGGTGTTTATAGATGAAC
ATCCCTTAATTTGAGGTGTTCCGCAGCTGTTTTGAAGAAGACAAGAAAAATTAAGTTTTCCTTGAATAAATGC
ATTATATGACTGTGACAGTGACTAATCCCCCTATGACCCCAAGCCCTGATTAAATCAAAAGACTCCTTTTTTA
AAAAATCAAAATAAAATTGTTACAACAT

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FIGURE 1615

CCTCTTTTCCGGCTGGAACCATGAGGGTGTAGAAGAGAAGAAGAAGGAGGTTCTGCTGTGCCAGAAACCTT
AAGAAAAAGCGAAGGAATTTCTGTAGAGCTGAAGATCAAGCGCTGAGAAAGAAGTTTGCCCAAAAGATGCTTCGA
AAGGCAAGGAGGAAGCTTATCTATGAAAAAGCAAAGCACTATCACAAGGAATATAGGCAAAATGTACAGAACTGAA
ATTCGAGTGGCGAGGATGGCAAGAAAAGCTGGCAACTTCTATGTACCTGCAGAACCCAAATTGGCGTTTGTCTATC
AGAATCAGAGGTATCAGTGCTGTGAGCCCAAAGGTCGAAAGGTGTTGCAGCTTCTTCGCCTTCGTCAAATCTTC
AATGGAAACCTTTGTGAAGCTCAACAAGGCTTCGATTAAACATGCTGAGGATTGTAGAGCCATATATAGCATGGGGG
TACCCCAATCTGAAGTCAGTAAATGAACATACTACAAGCGTGGTTATGGCAAAATCAATAGAAGCGAATTGCT
TTGACAGATAACGCTTTGATTGCTCGATCTCTTGTTAAATACGGCATTATCTGCATGGAGGATTTGATTCTATGAG
ATCTATACTGTTGGAAAACGCTTCAAAGAGGCAAAATAACTTCCTGTGGCCCTTCAAATTGCTTCTCCACGAGGT
GGAATGAAGAAAAAGACCACCCATTTTGTAGAAGGTAGAGATGCTGGCAACAGGGAGGACCAGATCAACAGGCTT
ACTAGAAGAATGAACTAAGGTGTCTACCATGATTATTTTCTAAGCTGGTTGGTTAATAAACAGTACCTGCTCTC
AAATTGA

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FIGURE 1616

MEGVEEKKEVPVAPETLKKKRRNFVELKIKRLRKKFAQKMLRKARRKLIYEKAKHYHKEYRQMYRTEIRVARMA
RKAGNFYVPAEPKLAFFVIRIRGISAVSPKVRKVLQLLRRLRQIFNGTFVKLNKASINMLRIVEPYIAWGYPNLKSV
NELIYKRGYKINKKRIALTDNALIARSLGKYGIICMEDLIHEIYTVGKRFKEANNFLWPFKLSSPRGGMKKKTT
HFVEGRDAGNREDQINRLTRRMN

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FIGURE 1617

GCACCATGGCGGTGGCAAGAACAAGCACCTTACGAAAGGCAGCAAAAAGGGGGCCAAGAAGAAAGTGGTTGATC
CATTTTCTAAGAAAGATTGGTATGATGTGAAAGCACCTGCTATGTTCAATATAAGAAATATTGGAAAGATGCTCA
TCACCAGGCCCAAGGAACCAAAATTGCATCTGATGGTCTCAAGGGTCGTGTGTTGAAGTGAGTCTTGCTGATT
TGCAGAAATGATGAAGTTGCACTTAGAAAATTCAAGCTGATTACTGAAGATGTTCAAGGTAAGAACTGCCTAACTT
CCATGGCAATGGATCTTACCTGTGACAAAATGTGTTCCATGGTCAAAAAATGGCAGACAATGATTGAAGCTCACGT
TGACGTCAGGACTATTGATGGTTACTTGCTTCGCTGTTCTGTGTTGGTTTACTAAAAAACGCAACAATCAGAT
ACAGAAGACCTCTTATGCCAGCACCAACGGGTCGCCAAATCCGGAAGAAGATGATGGAATCATGACCCGAGA
GGATTCCAGACAGCATTGGAAAAGACATAGAAAAGGCTTGCCAATCTATCCTCTCCATGATGCTTCGTTAGAAA
AGTAAAAATGCTGAAGAAGCCCAAGTTTGAATTGGGAAAGCTCATGGAGCTTCATGGTGAAGGCAGTAGTTCCTGG
AAAAAGCCACTGGGACGAGAGAGGTGCTAAAGTTGAACGAGCTGATGGTTTGAACCCAGCAGTCCAAGAATCTGT
TAAAGTTTCAGACTTCAAATAGTGGCAATAAAAAAGTCTATTGTGA

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FIGURE 1618

MDLTCDKMCMSVKKWQTMIEAHVDVRTIDGYLLRLFVCGFTKKRNNQIQKTSYAQHQRVRQIRKKMMEIMTRED
RQHWKRHRKGLPIYPLHDVFVRKVKMLKKPKFELGKLMELHGEGSSSGKATGDERGAKVERADGFEPFVQESV

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FIGURE 1619

TTTCTGCCCATGGACACCGCCGAAGAAGCATTGTTAAAGTCTCTCTTCACCCTGCCGTCATGTCTAAGTCAGAGT
CTCCTGAAGAGCCCCGAACAGCTGAGGAAGCTCTTCATTGGAGGGCTGAGCTTTGAAACAACATGATGAGAGCCTTG
AGGAGCCATTTTGAGCAATGGGGAAATGCTCACGGACTGTGTGGTCATGAGAGATCCAAACACCAAGCACCCCCAGG
GGCTTTGGGTTTGTCACATATGCTACTGTGGAGGAGGTGGATGCAGCCATGAATGCAAGGCCACACAAGGTGGAT
GGAAGAGTTGTGGAACCAAGAAGAGCTGTCTCGAGAGAAGATTCTGAAAGACCAGGTGCCCATCTTAACCTGTGAAA
AAGATATTTGTTGGTGGCATTAAAGAAGACACTGAAGAATCACCTAAGAGATGATTTTGAACAGTATGGAAAA
ATTGAAGTGATTGAAATCATGACTGACCGAGGCAGTGGCAAGAAAAGGGGCTTTGCCTTTGTAAATTTTGACGAC
CATGACTCCATGGATAAAGATTGTCATTAGAAAATACCATACTGTGAATGGCCACAACGTGAAGTTAGGAAAAGCC
CCGTACAGCAAGAGATGGATAGTGCTTCATCCAGCCAAAGAGGTGGAAGTGGTTCTGGAACCTTTGGTGGTGGT
CGTGGAGGTGGTTTCGGTGGGAAATGACAACCTTTGGTCATGGAGGAACTTCAGTGGTTGTGGTGGCTTTGGTGGC
AGTCATGGTGGTGGTGATATGGTGGCAGTGGGGATGGCTATAAIGGATTGGTAAATGATGGAAGCGATTTTGGA
GGTGGTGAAGCTACAATGATTITGGCAATTACAAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGAAAT
TTTGGAGGCAGAAGCTCTGGCCCTTATGGTGGTGGAGGCCAATACCTTTGCAAAACCAAAAACCAAGGTGGCTAT
GGCGGTTCCAGTAGCAGCGGTAGCTATGGCAGTGGCAGAAGATTTAATTAGGAAAACAAAGCTTAGCAGGAGCGG
AGAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAACAGATTTGTGAATCAGCCAAAGCACAGTGGTGGCAGGG
CCTAGCTGCTACAAAGAAGACATGTTTTAGACAAATACTCATGTGTATGGGCAAAAACTCGAGGACTGTATTTG
TGACTAATTGTATAACAGGTTATTTAGTTCCTGTCTGTGGAAAGTGTAAAGCATTCCCAACAAAGGGTTTTAAT
GTAGATTTTTTTTTTGCACTTATGCTGTGATTGCTAAATGTAATAGTCGTATCGTGATGCTGAATAAATGTCTTT
TCTTTTTAAATGCTGCTGTGTAAGTTAGTCTACTCTGAAGCCATCTTGGTAAATTTCCCAACAGTGTGAAGTTAG
AATTCCTTCAGGGTGATGCCAGGTTCTATTGGAAATTTATATACAACCTGCTTGGAGGGAGAAGCCATTGTCTTC
AGAAACCTTGGTGTAGTTGAACTGATAGTTACCGTTGTGACCTGAAGTTCACCATTAAAAGGGATTACCCAAAGCA
AAATCATGGAATTATGGTTATAAAAGTGATTGTTGGCACATCCATGCAATATATCTAAATTGAATAATGGTAC
TAGATAAAAATTATAGATGGGAATGAAGCTTGTGTATCATCCATTATCATGTGTAATCAATAAATGATTAAATCTC
CTTGAA

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FIGURE 1620

MRALRSHFEQWGLTDCVVMRDPNTKHPRGFGFVTYATVEEVDAAMNARPHKVDGRVVEPKRAVSREDSERPGAH
LTVKKIFVGGIKEDTEHHLLRDDFEQYGKIEVIEIMTDRGSGKKRGFAFVNFDDHDSMDKIVIQKYHTVNGHNCE
VRKAPSQQEMDSASSQRGRSGSNFGGGRGGFGGNDNFHGGNFSGCGFGGSHGGGYGSGDGYNGFGNDG
SDFGGGGSYNDFGNYNQSSNFGPMKGGNFGGRSSGPYGGGGQYFAKPQNQGGYGSSSSGSYGSGRRF

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FIGURE 1621

CCGCCGAAGAAGCATTGTTAAAGTCTCTCTTCACCCCTGCCGTCAITGTCTAAGTCAGAGTCTCCTGAAGAGCCCGA
ACAGCTGAGGAAGCTCTTCATTGGAGGGCTGAGCTTTGAAACAACCTGATGAGAGCCTTGAGGAGCCATTTTGAGC
AATGGGGAATGCTCACGGACTGTGTGATTCTGAAAGACCAAGTGCCCACTTAACGTGAAAAAGATATTTGTGG
TGGCATTAAAGAAGACAC TGAAGAACATCACCTAAGAGATGATTTGAACAGTATGGAAAAATTGAAGTGATTGA
AATCATGACTGACCGAGGCAGTGGCAAGAAAAGGGGCTTGGCCTTTGTAAATTTTGACGACCATGACTCCATGGA
TAAGATTGTCATTAGAAAATACCATACTGTGAATGGCCACAACCTGTAAGTTAGGAAAGCCCCGTCACAGCAAGA
GATGGATAGTGCTTCATCCAGCCAAAGAGGTGGAAGTGGTTCTGGAAACTTTGGTGGTGGTCGTGGAGGTGGTTT
CGGTGGGAATGACAACCTTTGGTCA TGGAGGAACTTCAGTGGTTGTTGGTGGCTTTGGTGGCAGTCA TGGTGGTGG
TGGATATGGTGGCAGTGGGGATGGCTATAATGGATTTGGTAATGATGGAAGCGATT TTGGAGGTGGTGGGAAGCTA
CAATGATTTTGGCAATTACAACATCAGTCTTCAAAATTTGGACCCATGAAGGGAGGAAATTTTGGAGGCAGAAG
CTCTGGCCCTTATGGTGGTGGAGGCCAATACTTTGCAAGCAGAAAGATTTTAATTAGG

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FIGURE 1622

AAGTCTCTCTTACCCCTGCCGTCATGTCTAAGTCAGAGTCTCCTGAAGAGCCCGAACAGCTGAGGAAGCTCTTCA
TTGGAGGGCTGAGCTTTGAAACAACCTGATGAGAGCCTTGAGGAGCCATTTTGAGCAATGGGGAATGCTCACGGAC
TGTGTGGTCATGAGAGATCCAAACACCAAGCACCCAGGGGCTTTGGGTTTGTCACATATGCTACTGTGGAGGAG
GTGGATGCAGCCATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAACCAAAGAGAGCTGTCTCGAGA
GAAGATTCTGAAGACCAGGTGCCCACTTAAGTGTGAAAAAGATATTTGTTGGTGCCATTAAAGAAAGACACTGAA
GAACATCACCTAAGAGATGATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGACTGACCGAGGCAGT
GGCAAGAAAAGGGGCTTTGCCCTTTGTAAATTTTGACGACCATGACTCCATGGATAAGATTGTCAATCAGAAATAC
CATACTGTGAATGGCCACAACCTGTGAAGTTAGGAAAAGCCCGTCACAGCAAGAGATGGATAGTGCTTCATCCAGC
CAAAGAGGTCGAAGTGGTCTGGAACCTTTGGTGGTGGTTCGTTGGAGGTGGTTTCGGTGGGAATGACAACTTTGGT
CATGGAGGAAACTTCAGTGGTTTGGTGGCTTTGGTGGCAGCTATAATGGATTGGTAATGATGGAAGCGATTTT
GGAGGTGGTGGAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCCATGAAGGGAGGA
AATTTTGGAGGCAGAAGCTCTGGCCCTTATGGTGGTGGAGGCCAATACTTTGCAAAACCACAAAACCAAGGTGGC
TATG

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FIGURE 1623

ACCCCTGCCGTCATGTCTAAGTCAGAGTCTCCTGAAGAGCCCGAACAGCTGAGGAAGCTCTTCATTGGAGGGCTGA
GCTTTGAAACAACTGATGAGAGCCTTGAGGAGCCATTTTGAGCAATGGGGAATGCTCAGGACTGTGTGGTCATG
AGAGATCCAAACACCAAGCACCCAGGGGCTTTGGGTTTGTCACATATGCTACTGTGGAGGAGGTGGATGCAGCC
ATGAATGCAAGGCCACACAAGGTGGATGGAAGAGTTGTGGAAACCAAGAGAGCTGTCTCGAGAGAAGATTCTGAA
AGACCAGGTGCCCACTTAACTGTGAAAAAGATATTGTTGGTGGCATTAAAGAAGACACTGAAGAACATCACCTA
AGAGATGATTTTGAACAGTATGGAAAAATTGAAGTGATTGAAATCATGACTGACCGAGGCGAGTGGCAAGAAAAGG
GGCTTTGCCTTTGTAAATTTTGACGACCATGACTCCGTGGTGGCTTTGGTGGCAGTCATGGTGGTGGTGGATATG
GTGGCAGTGGGGATGGCTATAATGGATTGGTAATGATGGAAGCGATTTTGGAGGTGGTGGAGCTACAATGATT
TTGGCAATTACAACAATCAGTCTTCAAATTTTGGACCATGAAGG

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FIGURE 1624

CAAAGGCTACTAAGTTAATGGTATTTTCTGCACAGAAAATACCATTAACTTAGTAGCCTTTGCTTAAAGGTGGGA
TTAATTCTCCATGAAGTCAGAATGAGACAATAAGCAGCATTAACTTCATAGGCACACAGAAGTAGTGCTCAAAC
GCTACCACCCCTTTTCAATTGCTATCTTTTGAAGGCACCACTATTGTGTTTGTCTGGGGTCTCGGGTGGACCTTA
TTCGCTCCGACAAGATGAAAGAAACAATCATGAACCAGGAAAACTCGCCAAACTGCAAGGCACAAGTGCACATTG
GTGGGAAAGGAAGTCTCGCAGAAAAGAAAGGTGGTTTCATAGAACAGCCACAGCAGATGACAAAAAACTTCAGT
TCTCCTTAAAGAAGTTAGGGGTAAACAATATCTCTGGTATTGAAGAGGTGAATATGTTTACAAACCAAGGAACAG
TGATCCACTTTAACAACCTTAAAGTTCAAGGCATCTCTGGCAGCGAACACTTTCACCATTACAGGCCATGCTGAGA
CGAAGCAGCTGACAGAAAATGCTACCCAGCATCTTAAACCAGCTTGTTGCGGATAGTCTGACTAGTTTAAAGGAGAC
TGGCCGAAGCTCTGCCCAAACAATCTGTGGATGGAAAAGCACCCTTGCTACTGGAGAGGATGATGATGATGAAG
TTCCAGATCTTGTGGAGAATTTTGTATGAGGCTTCCAAGAATGAGGCAAACTGAATTGAGTCAACTTCTGAAGATA
AAACCTGAAGAAGTTACTGGGAGCTGCTATTTTATATTATGACTGCTTTTAAAGAAATCTTTGTTTATGGATCTG
ATAAAATCTAGATCTCTAATATTTTTAAAGCCCAAGCCCTTGGACACTGCAGCTCTTTTCAGTTTTTGCTTATAC
ACAATTCATTCTTTGCAGCTAATTAAGCCGAAGAAGCCTTAAGTGGGAATTC

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FIGURE 1625

MKETIMNQEKLAKLQAQVRIGGKTARRKKKVHRTATADKKLQFSLKKLGVNNISGIEEVMFTNQGTVIHFN
NPKVQASLAANTFTITGHAETKQLTEMLPSILNQLGADSLTSLRRLAEALPKQSVDGKAPLATGEDDDDEVVDLV
ENFDEASKNEAN

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FIGURE 1626A

GCGGTGGCGCTGCGGAGACCCGGTCCAGACGCCCTGGCGGCCGCCGCACACAAGGCGCTTTCTAGCTCCCTCCCC
 CGAGCGCACAGCCCGCCTCCTTCCGGCGGCCCTGCAGTGGCAGGCTTGCTTGCCCTACCGTGACCGCTCCGGA
 GACGCTCTCGGGGTCTCTGGACAACGGTCCGGCGCGTGGGACGACAGACGGAGGCCAGGCTCCGATCGTAGCCGG
 TCCGGCAGCCATCGTTCCGGGCGCAGTCTCTCTCCCGGCTGGCCCTCCTTTCTCGGGGCAATTCGCCACCGCTTC
 CTGGGCTGAGACGACCGGTTCTGTCGCTCCTTGCCCGTGACCGCTGCTAGAACTCAGTTGTGCGTTGCGGCCAG
 TCGCCACTGCTGAGTGGAAAAAATGTGAGTCACTGAGTGTGATGAGAACCCGAACTCCAGGCGCAGCAGCGCTCC
 ATTAACATCTATCTGTTTCACAAGTCTCTACGCTGACAGCGTCTCACTACCTGAATCTTTTACGCCAGCAG
 CGTCTCTTCACTGACGCTCTTCTCCATGCCGGAATAGGACCTTCCCTTGCCACCGGGCAGTGTGCTGCATGC
 AGTCCGCTACTTTGAGCCATGTTTCAGTGTGGCTGAAAGAGAGCCAGGACAGTGAAGTCAACTTTGACAATTC
 ATCCACCAGAACTCTTGGAGCTGCTGCTTGACTATGCTACTCTCCCGGCTCATCATCAATGAAGAAAAATGCA
 GAATCGCTCTGGAAGCTGTTGACATGCTGGAGTTTCAAGACATCCGGGATGCATGTGCAGAGTTCTCTGGAAAAAG
 AACCTGCATCCCACTGCTGCTGGCATGCTGCTGCTGTGATGCACACAGTGCACCAAGCTGTACGAACTA
 TCTTGGAGAAATGTGCTCAGCACTTCCAAACCATCAGGAAGAATGAAGATTTCTCCAGCTGCCCGAGGACATG
 GTAGTGCAACTCTTTGTCAGTGAAGAGCTGGAGACAGAGGATGAAAGGCTTGTGTACGAGTCTGCAATTAAGTGG
 ATCAGCTATGACCTGAAGAAGCGCTATTGCTACTCCCAAGACTGTTGCAGACAGTAAGGCTGGCCTCTGTCGCA
 GCCATCTATCTCATGGAGAAATGGCCATGGAGGAATCATCAACAGCAGAAAGAGTAAGGAATTTGTGGAA
 GAGGCCATCAGGTGCAAACTGAAATCCTGCAGAAATGACGGTGTGGTAACCAAGCTCTGTGCCCGACCTCGGAAA
 ACTGGCCATGCCCCTCTTCTTCTGGGAGGACAGACTTTCATGTGTGACAAGTTGTATCTGGTAGACAGGAAGGCC
 AAGAATAATCATTTCCCAAGGCTGCATCTCCAGCCCAAGAAAAAGATTTAGTGCATGTGCGATTGGCTGCAAAAGT
 TACATTATGCTGGGGGCGGGCTGTGAAAAATGGGGTCTCAAAAGATGCTCGGGTTTATGATACCTGCACGAGGAG
 TGGTCCAAGGCTGCCCACTGCTGGTGGCCAGGTTTGGCCATGGCTCTGCTGCACTGAAGCACTGCTGTATGTG
 GTTGGGGGCGCACAGCGCCGCACTGGCTGCCCTCCGCGCTCCCCCTCAGTCTCTCTAAAGCAGGTAGAACAATAT
 GACCCCACAATCAACAAATGAGCATGGTGGCCCCACTCCGAGAAGGCGTTAGCAACCCCGCAGTAGTGAGTGGC
 AACTTAAGTTATTTGCTTTCCGAGGTACCAAGTGTCACTGATGACAAGCTCCCAAGGTTCAAGTTACGATCAG
 TGTGAAAAACAGGTGGACTGTACCGGCCACCTGTCCCCAGCCTGGCGTTACACAGCAGCAGCTGTGCTGGGGAAC
 CAGATTTTTATTATGGGGGTGATACAGAAATTTCTGCTGCTCTGCTTATAAAATTCACACAGTGAGACTTACAG
 TGGACCAAGGTGGGAGATGTGACAGCAAAAGCGCATGAGCTGCCATGCTGTGGGCTCTGGAACAACTCTACGTG
 GTTGGAGGATACTTTGGCATTACGCGATGCAAGACTTTGGACTGCTACGATCCAACATTAGACGTGTGGAACACG
 ATCACCACCTGTCCGCTACTCGCTGATTCTCTACTGCATTGTGACGCACTGGAAAACTCGCCCTCTTAAATGCGAG
 TACATTCTAAAGAGAGTGAGCATGAGCTCACTCATCACTCGATGAGATAATAGATTTTCACTTTCCGAGAGG
 CCAAGTCTAATGAAGAGAAAAAAGGAAAAAGGTTGCAAGACTCGAATAAAATCTGCTGCACCTTGTAAATGCT
 CTAATCGGACATGAAGAAAAAGGGGCGAGGAGGGGGGTGGGATTTTGGTGCAGTAGCACATGGTTTAAATATG
 AATGAACAAACCTGTGATCTAGTCCCTGTCTGTAAATTTGGGATTAATGTCAATGTAAATCAGCCCTCAAGAGG
 AGAGAAAAGCTGGACATTTCCCTTGGCTGACCAATTTAGCAATTTGATTCTGGGCGCCCACTTATGTAGT
 AGAATTTGAAATGTTGTCACTCTCTCTGAGGACAGAGCTTGAAGCCTCCACACAGCTGCTGCTGAGAGATCA
 AAGCCCACTGTGGGCTCGAGAGGGGAAGCTGGCTGGGCTGGCTGAAGAATGAAGACCCTGGACTCTCGCTTAAAT
 CTCTAGAGGGTCTGCTCCCAAGGAAGCTTTCTGAACAAATGGGGACTTTGTGGTAGCATTGGTAGATGTTCTT
 TCTATTATTAAGTGACTTTAACTTTCCCTTGGCTGTTAAGAAGTTTGTATAGATTTAGCTATTATTTGTTGCTG
 ATGCTCGTAGCTGAAACAACTGACCTACAGCTGTCTTACATGTATGGAAGTGTGGTAATGGTTGATGCTTTTGA
 CATTTTGTGGCTGTTGAGATGTGCTTTGCTGCACAAACATGAAAAATTTTGAAGTTACAATTTGGAGCATAACTGG
 AGGGTGGGTTGGGGAGGGGTGGATTTTAAAAATGTCAAGACAGGGAAGGATGACAAAAATGGAATTTAAATGACA
 TCCTAGAGGTAGAGAAAAACCTGGAGATCGCTTTTCTCAGACTCACCACCTTTTAAATGGGATTTTCAATGGGTTGG
 TGTGCTGATAGGGTAAGGGGAGGCTGCTTTCTGCCCTTCTCCCACTCCCACTGTGATTACTTAATTCAGTCTC
 AGCTGCTGAAATTTGGAAGAGGACCAATGCTTTACAGTTTCTTTGTTGATGTTCTGAAATCTCTGGAAAAA
 TTCTATGGAATAGTTCTGTATATAGGGCACAAGTAAAGGCATTTGCCAAAGTTATTTATTTATTTATTACCTTA
 AGAATGCTTTGCCATACCAACTATTAATGGGAAAAACGGCAGTATCACAGATGTAATTAACCTACCCAGATTTAC
 TGGGCTGAACTCACTCTCTTCTGCTATATGATTAGCAAGTCTAGAAGGCTCCAGAGACATTAATTCATTGAT
 GCACAATGTATACCTCAGTGCTCACCGTAGGCAAACTCTTTTAAAAAATCTTTTGGTGCAAGTAAACAT

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FIGURE 1626B

TTGGCCACAAAACACCAAAGAATTGTAGGCAGTGGCCCTATTGAGAAGTTTTCCGGTAGAGTTGGAATCAGTT
GTGAATACATTCTTTGCTAGTTGGAGTGCTTGTTTACTAAGCATGTGCCGTCGTAGGTATTAGTGCTAGTCTCAG
ATAGGTGCTTCCCTGAGGTGCAGGGGAAGACCAAAGTTTGCAACTCGAAGTCTTTCGTCCATGTTTCTCACAT
TGCTGTATTTTAGAAAAATAGGGGTTAAGACTGATAACAACCTTTTACATTGTGACTGTGTTTGCAATTGTCTAATG
ACAGATAAATCCTTAACATTTCTCTCCACCTTAGTACTTTAGACTAATTGTGTTTGCCGTCCATGCCATGAATG
AGTGGGCTGTAGTTGGGCTAAATAAATGAGCTGTGTGGAAGAAAAGAAATCACAGTACTTTCCAGCAGTCAGTCCC
TGGTTCCTAGATGTGTTCTAAGCAATGCAAAATGTCTAATTGTCCCCAGTGGGCATAGTCAGTGTCTTTATATT
GTAGCAGTTACAGCTCTGTAGTTTATGATGCAAACTGCCAAGAGAGATGTATGTGCTACTGCATGGCTTCTGAA
AGCAGGATGAATTTCTGCAGCTGTTTCAAAGTTGGGGTCTGTTCTTGAAATCCTCTATTAAATTACTGTGTGTAG
CCAGAGGGAGCTGTGGTAAGGGTTGGGCCCCAGCCTGTAGGGAACCTTCTGGACTCCCACCTTTGAATCGATA
TAGGCATTTGGTCTCACTACTTGACCAATTCTCACCCTGTGAAACGTCCACACTTTGAAGCAAAATACAATTCACA
GCACAGTACACAAAAACCTTGGCATAAGACAGAGAAGGTTCTTCTTATTTTGTGGGCTGGTTGCTGTAGAAC
ACATAACAAAGGGCAGCCCTCCACTTCTGGTATAATTGTGTAGCCCTTTTCTTTGGGCTTGACACCTGTCTTGA
ATAAGAGTGATTAGAGCTGCATAATGTCCCTCTCTTGGCTATTGACCATGTGGTTCACGTACAAAACCTCTGTATA
AGTTGAAGGAAAATGTTTATGTTTATGTACTTGTGCTATGACTACATTTGAGGTTTGTAAAACGTGTAT
TTTTTTTTTTTTTCAATGTGAACTGAAGTCAATAATTATTAGAGATTTTCTCTTC

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FIGURE 1627

CTGATCCGGGCCGGGCGGGAAGTCGGGTCCTCGGCTCGGCAGACCGGGCGGAAAGCAGCCGAGCGGCC
ATGGAGCTGTGCGGGCTGGGGCTGCCCGGCCGCCATGCTGCTGGCGCTGCTGTTGSCGACACTGCTGGCGGGC
ATGTTGGCGCTGCTGACTCAGGTGGCGCTGGTGGTGCAGGTGGCGGAGGCGGCTCGGGCCCCGAGCGTCTCGGCC
AAGCCGGGCGCGGCGCTGTGGCCCTGCCGCTCTCGGTGAAGATGACCCCGAACCTGTGCATCTCGCCCCGGAG
AACTTCTACATCAGCCACAGCCCCAATTCCACGGCGGGCCCCCTCTGCACCTGCTGGAGGAGCGTTTCGACGA
TATCATGGCTATATTTTGGTTTCTACAAGTGGCATCATGAACCTGCTGAATTCAGGCTAAACCAGGTTTCAG
CAACTTCTTGCTCATAACCCCTCAGTCAGAGTGTGATGCTTTCCCAACATATCTTCAGATGAGTCTTATACT
TTACTTGTGAAAGAACCAGTGGCTGTCCTTAAGGCCAACAGAGTTTGGGGAGCATTACGAGGTTTAGAGACCTTT
AGCCAGTTAGTTTATCAAGATTCATGGAACCTTCACCATCAATGAATCCACCATTAATTGATTCTCCAAGGTTT
TCTCAGAGGAATTTTGATTGATACATCCAGACATTATCTGCCAGTTAAGATTATTTCTAAAACTCTGGATGCC
ATGGCTTTTAATAAGTTTAATGTTCTTCACTGGCACATAGTTGATGACCAGTCTTCCCATATCAGAGCATCACT
TTTCTGAGTTAAGCAATAAAGGAAGCTATTCTTTGCTCATGTTTATACACCAAATGATGCCGTATGGTGATT
GAATATGCCAGATTACGAGGAATTTCGAGTCTGCCAGAAATTGATACCCCTGGGCATACACTATCTTGGGGAAAA
GGTCAGAAAGACCTCTGACTCCATGTTACAGTAGACAAAAACAAGTTGGACTCTTTTGGACCTATAAACCTTACT
CTGAATACAACATACAGCTTCCTTACTACATTTTCAAAGAAATTAGTGAGGTGTTTCCAGATCAATTCATTAT
TTGGGAGGAGATGAAGTGGAAATTTAAATGTTGGGAATCAAATCCAAAAATTCAAGATTTTCATGAGGCAAAAAGGC
TTTGGCAGAGATTTAAGAACTAGAAATCTTTCTACATTCAAAAGGTTTGGATATATTGCAACCATAAACAAG
GGATCCATTGCTCGGCAGGAGGTTTTGATGATAAAGCAAAGCTTGCGCCGGCCACATAGTTGAAGTATGGAAG
GACAGGCATATCCTGAGGAATCAGTAGAGTCACAGCATCTGGCTTCCCTGTAATCCTTTCTGCTCCTTGGTAC
TTAGATTTGATTAGCTATGGACAAGATTGGAGGAATACTATAAGTGGAACTCTTGATTTTGGCGGTACTCAG
AAACAGAAACAACCTTTTCAATTGGTGGAGAAGCTTGTCATGCGGAGAAATATGTGGATGCAACTAACCTCACTCCA
AGATTATGGCCTCGGGCAAGTGCTGTTGGTGAGAGACTCTGGAGTTCCAAAGATGTCAGAGATATGGATGACGCC
TATGACAGACTGACAAGGCACCGCTGCAGGATGGTCGAACGTGGAAATAGCTGCACAACCTCTTTATGCTGGATAT
TGTAACCATGAGAACATG**TAAAA**AAATGGAGGGGAAAAAGGCCACAGCAATCTGTACTACAACTCACTTTATTTT
AAATCATGTAATAATAAGATATTAGACTTTTTTGAATAAAATATTTTATTGATTGAA

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FIGURE 1628

MELCGGLPRPMLLALLLATLLAAMLALLTQVALVVQVAEAAAPSVSAKPGPALWPLPLSVKMPNLLHLAPE
NFYISHSPNSTAGPSCITLLEAFRRYHGYIFGFYKWHHEPAEFQAKTQVQQLVSIITLQSECDAPFNISSESYT
LLVKEPVAVLKANRVVGALRGLETFSQLVYQDSYGTFTINESTIIDSPRFSHRGILIDTSRHYLPVKIILKTLDA
MAFNKFNVLHWHIVDDQSFPYQSIITFPELSNKGSYSLSHVYTPNDVRMVEYARLRGIRVLPEFDIPGHTLSWGK
GQKDLLTPCYSRQNKLDSEFGPINPTLNTTYSFLTTFKKEISEVFDPQFIHLGGDEVEFKWESNPKIQDFMRQKG
FGTDFKKLESFYIQKVLDIATINKGSIVWQEVFDDKAKLAPGTIVEVWKDSAYPEELSRVTASGFVILSAPWY
LDLISYGQDWRKYKVEPLDFGGTQKQQLF IGGEACLWGEYVDATNLTPRLWPRASAVGERLWSSKDVDRMDDA
YDRLIRHRCRMVERGIAAQPLYAGYCNHENM

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FIGURE 1629

ATGGGAAGAAGATGAGTTTCATTGGAGAAAAAACATTCCAACGTTATTGTGCAGAATTCATTAAACATTACAACAG
ATAGGTGATAGITGGGAATGGAGACCATCAAAGGACTGTTCTGATGGCTACATGTGCAAAATACACTTTCAAATT
AAGAAITGGGTCIGTGATGTCACATCTAGGAGCATCTACCCATGGACAGACATGCTTCCCATGGAGGAGGCTTTC
GAGCTACCCCTTGGATGATTGTGAAGTGATTGAAACTGCAGCAGCGTCCGAAGTGATTAAATATGAGTATCATGTC
TTATATTCCTGTAGCTACCAAGTGCCTGTACTTTACTTTTAGGGCAAGCTTTITAGATGGGAGACCTTTAACTCTG
AAGGACATATGGGAAGGAGTTCATGAGTGTATAAGATGCGACTGCTACAGGGACCATGGGACACTATTACGCAA
CAGGAACATCCAATACTTGGGCAACCCTTTTTGTACTTCATCCCTGCAAGACGAATGAATTCATGACTCCTGTGA
TTAAAGAATTCTCAGAAAATCAATAAGAAATGTCAACTATATCACATCATGGCTGAGCATTGTAGGGCCAGTTGTT
GGGCTGAATCTACCTCTGAGTTATGCCAAAGCAACGCTCTCAGGATGAACGAAATGTCCCTTAA

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FIGURE 1630

MEEDFIGEKTFRYCAEFIKHSQQIGDSWEWRPSKDCSDGYMCKIHFIKNGSVMSHLGASTHGQTCLEPMEEF
ELPLDDCEVIETAAASEVIKYEYHVLYSCSYQVPVLYFRASFLDGRPLTLKDIWEGVHECYKMRLLGQPWDITIQ
QEHFILGQPPFVLHPCKTNEFMTFVLKNSQKINKNVNYITSWLSIVGPPVGLNLPLSYAKATSQDERNVF

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FIGURE 1631

TTTGCAGATGACGCCGCCGAGGAAAACGTGTGTACTATTAGCCATGGTCAACCCACCCTGTTCTTCGACATTGCC
GTCGATGGCGAGCCCTTGGGCCGCGTCTCCTTTGAGCTGTTAGCTGACAAGGTCCCAAAGACAGCAGAAAATTTT
CATGCTCTGAGCACTGGAGAGAAAGGATTGGTTATAAGGGTTCCTGCTTTCACAGAATTATTCAGGGTTTATG
TGCAGGGTGGTGACTTCACACGCCATAATGGCACTAGTGGCAAGTCCATCTATGGGGAGAAATTTGAAGATGAG
AACTTCATCCTAAAGCATACAGGTCCCTGGCATCTTGTCATGGCAAAATGCTGGACCCAAACAAAATGGCTCCCAG
TTTTTCATCTGCACTGCCAAGACTGAGTGGTTGGATGGCATGCATGTGATCTGTGGCAAAGTGAAAGAAAGGCATG
AATATTGTGGAGGT CATGGAGTGCTTTGGGTCCAGGAATGGCAAGACCAGCAAGAAGATCACCATTGCTGACTGT
GGACAACTCGAATAAGTTTGACTTGTGTTTTATCTTAACCACCAGACCATTCCCTTCTGTAGCTCAGGAGAGCACC
CCTCCATCCCATTGCTCGCAGTATCCTAGAATCTTTGTGCTCTCGCTGCAGTTCCTTTGGGTTCCATGTTTTTC
CTTGTTCCCTCCCATGCCTAGCTGGATTGCAGAGTTAAGTTTATGATTATGAAATAAAAACTAAATAACA

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FIGURE 1632

CTCTTTCGCTCAGGCCCGTGGCGCCGACAGGATGGGCAAGTGTCGTGGACTTCGTACTGCTAGGAAGTCCGTAG
TCACCGACGAGACCAGAAGTGGCATGATAAACAGTATAAGAAAGCTCATTGGGCACAGCCCTAAAGGCCAACCC
TTTGGAGGTGCTTCTCATGCAAAAGGAATCGTGCTGGAAAAAGTAGGAGTTGAAGCCAAACAGCCAAATTCTGC
CATTAGGAAGTGTGTAAGGGTCCAGCTGATCAAGAAATGGCAAGAAATCACAGCCTTTGTACCCAATGACGGTTG
CTTGAACCTTTATTGAGGAAAAATGATGAAGTTCGTGGATTGGTTCGCAAGGTCATGCTGTTGGTGATAT
TCCTGGAGTCCGCTTTAAGGTTGTCAAAGTAGCCAAATGTTTCTCTTTGGCCCTATACAAAGGCAAGAAGGAAAG
ACCAAGATCATAAATATTAATGGTGAAACACTGTAGTAATAAATTTTCATATGCC

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FIGURE 1633

MGKCRGLRTARKLRSHRRDQKWHDKQYKKAHLGTALKANPFGGASHAKGIVLEKVGVEAKQPNSAIRKCVRVQLI
KNGKKITAFVPNDGCLNFI EENDEVLVAGFGRKGHAVGDIPGVRFKVVVKVANVSL LALYKGGKERPRS

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FIGURE 1634

TTTATTTTAAATGCCGTAAAGGAAGCTGATTTTTGTTTGTGTTTTTAAACAGCAGCTTTAAATCCAGTTTGTGTT
TTGTCAACTTGAACTGGAACTCTCTTTTGTTACTTTGGAGGTGATAAATAGTTTTCAAATCTGCTGATTTGTATAC
TGTGGCACAAGATATCTTTGAACCTTTGATAGTGAAGGAGACCTTCAACAATTTTTAGTCTTAGGCGAGAGGAATAT
TAGGAATGTGACITCTCTAAATTTTACAATAGAGCAGTTATTTAAGGTCATGGTTAAACATTTCTTAAGGTTCAACT
AAAAATTCAGTTAAAAATTCAGAGCTACGAGGAACCTTAAATCTTAGCTAAAAAATTAACCTGTTGTAGATAGTATTA
TAGATTGTTTGACAGCTATTAATTCATCATATAAAGATAAAAATGAAGAACTCTCCCTTTTTTAAACAAAAAAAT
TATTTCTAGATTAATAGGCTAGTAGTTATTTCTGCAGAAACACGATGGAAGCTGAAGGCCACCTATTTTTATT
TAGACTAATTTAAACCACTTGGAAATGGATTCTAGGAAACATCTTAAGCTTGTGTGTTGCCTGTGGTGGTTTTTTG
TTTGGGGGTGTTTTTGGTTTTGGTTTGTATTTCTGTATTTTGTATCTGGGGATTTTTTGTGTTGTTGTTTTGG
TTTGGTTTTGTTTTATATTTTTTGGCATGCTATGGCAGTTAAAAGTGGTATATTTTGCCTTAGATAGGGAATCA
GGTTATAATCATTGTTCTTCTCTAAACTGCCTCTTGGGCTTTACATCAGGTCAAGGATTTTTTAGGGTTCTCAA
AAATAGGATTTCTGTGAGTATGATGCTGAGTAAGTCACTTTCTGGCTCTAATTTCTGGGTGGCCATCTGTT
GTCCAGCTCTGCTGCCAACTGGACTTTCGGAAGCCATGTCAACTAATTTTTTATATGCTAAGACAAATCGAATA
TGAAAAGAGGAAGAATATTTCTAGATATTTCTAAGACATTTCTAATTTGGCATCTCAGAGGAGGTAGGTGGAAAGT
AAAGGAAGAGATAATTTTTGGGGGAAAAATTTTGGAAACATACAAAACGTTTTGCTTTGTATAGATGCTAAACAGA
GTGGGAGGCAGCATATTTGTGAACAACAACCAATTCTGACCTTTTGAACACAAAGCTTTTGGGAGAAGTCAAGGAGAG
ACACAGTATGAATAAAGCAATTAACATTTTCTTAATGTATATTTTCAAAGGAGGACCGGAATCCGTGTTCTC
TAACCAAGGGGAGGTAGGTGGTTTTAAGCCACAGAAATATGAGATATTTCTGTGGTTTTTGGGGGTG
GTGGGATGCAAGGTTTATTAAGATCAATTTAAGCATCAGATAGACTATCCCTTTTTATTTTTTAACTTTTAGG
TTCAAGGGTACATGTGACAGTTGTTATATAGTAACTCATGTCAGTGGTTTTTGTGTACAGATATTTTGTGCA
CCCAGGTGCTAAGCCTAGTACCCAGTAGTTATTTTCCCTGCTCTTCTCCCTCCACCCCTCCACCCCTCAAGTA
GGCCCCAGTGTCTGTTGTTCCCTTTCTTGTGCTCTGAGTTCTCATCATTTAGCTCCCTACTTCTAAATGAGAACA
TGATTTTGGTTTTCTGTTCTGTGTAGTTTGTCTAAGGATAATGGCCTCCAGCTCAGATGGAAATCTCTATCATATA
TAGACTCTGTTGTACAGGGCAGGATCGGATGATGGACACTGAAGTCTCAGCTGTGTAAGTTCAGTTGCTCTCCC
TAGCCTCTCTTTGGCTTCAGAGCTCTTTGATTCATCTATCCTGGTATTTTTTGTGTGCTGATGTTTAGTTCTGG
ATTGGCTTCAGCTGTGCTAAATAGGAAGGGCGTTGCTTTTCAAGCAATCTTAAAGGTGGTCAATCAAAAGGCCA
GAGTCTGAATCCCTTCTGTGCTTAAATAATTTAGGATCAAGTCCAGTGTCTTGTATATCCCTGTCTTACTGTG
CCAGACACTATCTTGAATGCTTTTATATGTTTCAGGTTCAAAATCGCTCTTTCATACCAGGGGATGATAGTAAGCT
GTAACCTGCAATAGATTTCTTCACTCTTAGTAATAAGATGATCAGTCTAGTTAGGACAATAAGAGATTGAATAAA
TTAACTTTTCCAGGTTTACAGAGTAAAAATGAGCAGATCTCTGCCTGGTTTTTGTGAAAAAGAGTTAGCAGCTGGTA
AATAGAATATTTTACTCTTACACCACTTTCTTCAGTATATCATCACTGAAGACAGGAAGATAGGCACAGACTTC
TTCCCTGATAGTAATTCATAGTGCATAGGTGAAAAGAGATGAAGTATGATTAAGAAGTACATGTGATGGCATTTA
TTAATCAGATAATCCAGGATTTCTAGAAGAAAATAAAGAAAGAGTGACAGTTTCAGTTAGGGTGTGAACCTCCAGAG
GAGCAGCTTAAAGCTGAACTAGAGCATTTGTGCAAAAGCACAGTAGCTGTTAAAGAACTAGAAAATAACCTGAC
TTTGCCACTTCCGGAGTATTAAAGACATAAGCCTAGAAGGTTAGGCAAAAGGTTAGATCTTAGACTGTCTGTATT
TTTCTATTCTGTGATTACTACTCACTTCAAAATGAAATATGTTTTTCTCCTCGCTTAACCAAACTACTCAAGG
GCAGAAATTTAAATCTCTTCTTGGTGTATGTGCAAAAGAGGTTGAATATATTCATGCTACCTTATTTTGGACTA
GGAATACAGTAGTATACTTTCCGAAGACTTGCTGAATAGTATATAAGGTTGGAGGCACTGACTAGTTAGTGCAG
TATTTTAGAAGCTCTTAATAGCTTACTCTTGTATACCAAAAGCAGCCCTGATGTTTAAAGCACACCACTGCAC
AAGAAGCAGTGATGGTTGCATTTACATTTCTCTGGGTGCACAAAAAAAATTTCTCAAAAGCAAGGACTTAGCTTT
TTTGCAAGCCCTTTGGAAGTTACTGGATCATAGAGAAGCTTATAACAAGAAATGGAAGATCTTAAATAACTCACT
TTCTTTGGTATCCAGTAACAGTAGTGTGTTCAAAATATGTAGCTGATTAATACCAGCATTGTGAACGCTGTACAA
CTTGTGGTATTTACTAAGCAAGTTACTACTAGCTTCTGAAAAGTAGCTTCATAATTAATGTTTATATCACTGC
CTTCCATGACTTTTACTTGGCCCTAAGCTAATCTCCAAAATCTGAAATGCTCATCAATATCAGAAAAAAGGGG
GAGGTGGAATATATTTCTCTGTGATTTAAGAGTACAGAGAATCATGCACATCTCTGATTAGTTCATATATGTCT
AGTGTGTAATAAAGTCAAGATGAATCTC

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FIGURE 1635

MASSSDGISLSYRPVVTGQDRMDTEVLSSLSSVALPSLLLASESFDISIYPGIFCVLMFSSGLASAVLIGRALSF
QAILKGGQSKGQSLNPF CGLNNLRIRKSSVLLIPVLLCQTLS

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FIGURE 1636

CGGGATTAGATCAGCTCCGCGAGGCCGCGGAAGTAGCTGATACTCTCATTGGTTGCAAAACCTTGATCTGTGA
AAGCGGGCGTTTTTGGGAAGATACCGGAAGTAGAGTCACGGAGAGGTATTAAGAAATGGAGAGAAAAATAGCAGAA
TCCACCTTGTTTCTGAACCCAGTATAACTCATTTTCTACAAGTATCTTGGGAGAAAACTGGAATCTGGTTTTG
TTATTACACTTACTGATGGTCATTGAGCATGGACTGGGACAGTTTCTGAATCAGAGATTTCCCAAGAAGCTGATG
ACATGGCAATGGAAAAAGGAAATATGTTGGTGAAGTACGAGAAAAAGCATTGTTGTGAGGAGCAGGACCAGCTGATG
TATACACGTTTTAATTTTCTAAAGAGTCTTGTTATTTCTCTTTGAGAAAAACCTGAAAGATGTCATTTCAGAC
TTGGTTCCTTCAACCTAGAGAAAGTTGAAAAACCCAGCTGAAGTCATTAGAGAACTTATTTGTTATTGCTTGGACA
CCATTGCAGAAAAATCAAGCCAAAAATGAGCACCTGCAGAAAGAAAAATGAAAGGCTTCTGAGAGATTGGAATGATG
TTCAAGGACGATTTGAAAAATGTGTGAGTGCTAAGGAAGCTTTGGAGACTGATCTTTATAAGCGGTTTATTCTGG
TGTTGAATGAGAAGAAAAACAAAAATCAGAAGTTTGCATAATAAATTAATAATGCAGCTCAAGAACGAGAAAAAG
ACATCAACAAGAAGGGGAACTGCAATCTGTTCTGAAATGACTGCTGACCGAGATCCAGTCTATGATGAGAGTA
CTGATGAGGAAAGTGA AAAACCAACTGATCTCTGCGGTTGGCTTCAGCTGCTGTAAGTAAAGATGATTCCATTA
TTCAAGTCTTGATGTCACTGATATTGCACCAAGTAGAAAAAGGAGACAGCGAATGCAAAAGAAATCTTGGGACAG
AACTAAAAATGGCTCCTCAGGAGATCAGCTTCAAGAAAAAGGAAAGCCTGATTCTTCACTACCTGAGACGTCGA
AAAAGGAGCACATCTCAGCTGAAACATGCTTTAGAACTCTGAGAAAAAGCAGAGCCAGAAAGACCTCTTTGATG
AGATTTAAGAGTCTCAAAAAATACTTTGATGTTCACTAGACTAGTTTCTTATTCAATTTCTTTAAAAATGAAAAAG
GAGAATTTCAAGTCAGCAGCGCCCTATTACCGTATCTTACAATTAATTACATACACAGTGAATGAAACCATTTGT
GCAAAATGGATTACACATGTATACAAAGATACGATTTGATGATGACACTGGCACATTGAGTCTCAAACTATTTCAT
TCAGCATGCCTATAATTACATAAATTTGATGAGACTTTTGTGCAAGGACACATTTATCATATTTCATTACAC
ATATTATATGTGATAGCTGTCCAACATCTGTCTGGGAAGATTTTGAAAAAGCAGCAAAAGAAAAATCATTTTAA
AATGTCCTCAGCTTTTTTGAATAGACGTATTCAACATATTTCTGAACATTGATGTTTGAACATTTTAAATTTGTG
TGATGATGTAGAAAAATATAATTTTAGTTTGTACATAAACATTGTGAAAATCTGATAATAAAATTTTGTATACATT
GAAAAA

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FIGURE 1637

MERKISRHLVSEPSITHFLQVSWKILES GFVITLTDGHSANTGTVSESEISQEADDMAMEKGYVGELRKALL
SGAGPADVYTFNFSKESCYFFFEKNLKDVSFRLGSFNLEKVENPAEVI RELICYCLDTIAENQAKNEHLQKENER
LLRDWNDVQGRFEKCVSAKEALETDLYKR FILVLNEKKTIRSLHNKLLNAAQEREKDIKQEGETAICSEMTADR
DPVYDESTDEESENQTDLSGLASAAVSKDDSIISSLDVTDIAPSRKRQRMQRN LGTEPKMAPQENQLQEKEKPD
SSLPETSKEHISAENMSLET LRNSSPFEDLFDEI

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FIGURE 1638

CGGGATTAGATCACGTCGCCGAGCGCGGCGGAAGTAGCTGATACTCTCATTGGTTGCAAAACCTTGATCTGTGA
AAGCGGGCGTTTTGGAAGATACCGGAAGTAGAGTCACGGAGAGGTAGGATCCGGAAGTGGGGCTGCCTCTTTAAA
TAACAAAAATCTGAGGTATTAAGAAATGGAGAGAAAAATAAGCAGAATCCACCTTGTTCTGAACCCAGTATAAC
TCATTTTCTACAAGTATCTTGGGAGAAACACTGGAATCTGGTTTTGTTATTACACTTACTGATGGTCATTACGC
ATGGACTGGGACAGTTTCTGAATCAGAGATTTCCCAAGAAGCTGATGACATGGCAATGGAAAAAGGAAATATGT
TGGTGAATCAGAAAAAGCATTGTTGTCAGGAGCAGGACCAGCTGATGTATACAGTTTTAATTTTTCTAAAGAGTC
TTGTTATTTCTTCTTTGAGAAAAACCTGAAAGATGTCCTCATTAGACTTGGTTCCTTCAACCTAGAGAAAGTTGA
AAACCCAGCTGAAGTCATTAGAGAACTTATTTGTTATTGCTTGGACACCAATTGCAGAAAAATCAAGCCAAAAATGA
GCACCTGCAGAAAGAAAATGAAAGGCTTCTGAGAGATTGGAATGATGTTCAAGGACGATTGAAAAATGTGTGAG
TGCTAAGGAAGCTTTGGAGACTGATCTTTATAAGCGGTTTATTCTGGTGTGAATGAGAAGAAAAACAAAAATCAG
AAGTTTGCATAATAAATTATTAATGTCAGCTCAAGAACGAGAAAAAGGACATCAAAACAAGAGGGGAACTGCAAT
CTGTTCTGAAATGACTGCTGACCGAGATCCAGTCTATGATGAGAGTACTGATGAGGAAAGTGAACCAAACTGA
TCTCTCTGGGTTGGCTTCAGCTGCTGTAAGTAAAGATGATTCATTATTTCAAGTCTTGATGTCACTGATATTGC
ACCAAGTAGAAAAAGGAGACAGCGAATGCAAAAGAAATCTTGGGACAGAACCTAAATGGCTCCTCAGGAGAAATCA
GCTTCAAGAAAAAGGAAAGCCTGATTCTTCACTACCTGAGACGTCGAAAAAGGAGCACATCTCAGCTGAAACAT
GTCTTTAGAACTCTGAGAAACAGCAGCCAGAAAGACCTCTTTGATGAGATTAAACAGTCTCAAAAAATACTTTG
ATGTTCACTAGACTATGTTTTCTATTCAATTTCTTAAATGAAAAAGGAGAATTTCAAGTCAGCAGCCGCTATTA
CCGTATCTTACAATTTAATTACATACAGTGAATTGAAACCATTGTGCAAAATGGATTACACATGTATACAAAG
ATACGATTTGATGATGACACTGGCAGATTGAGTTCTAAACTATTTCATTGAGCATGCCTATAAATTACATAAATTGT
ATGAGACTTTTTGTTGCAAGGACACATTTATCATATTTCATTCACACATATTATATGTGATAGCTGTCCAACATC
CTGTCTGGGAAGATTTGAAACAGGACAAAGAAACATCATTTTAAATGTCTTCAGCTTTTTTGAATAGACG
TATTCAAACATATTCTGAACATTGATGTTTGAACATTTTAATTTGTGTGATGATGTAGAAATATAATTTAGTT
TGTACATAAACATTGTGAAATCTGATAATAAAATTTTGATACATTGAAAAAAA

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FIGURE 1639

MERKISRILVSEPSITHFLQVSEKTLSESGFVITLTDGHSAMTGTVSESEISQEADDMAMEKCKYVGELRKALL
SGAGPADVYTFNFSKESCYFFFEKNLKDVSFRLGSNLEKVENPAEVIRELICyclDTIAENQAKNEHLQKENER
LLRDWNDVQGRFEKCVSAKEALETDLYKRFILVLNEKTKIRSLHNKLLNAAQEREKDIKQEGETAICSEMTADR
DPVYDESTDEESENQTDLSGLASAAVSKDDSISSLDVTDIAPSRKRRQRMQRNLGTEPKMAPOENQLQEKEKPD
SSLPETSCKEHI SAENMSLETIRNSSPEDLFDEI

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FIGURE 1640

AGGTAAACAGAATCTGGTGATTATGGGTAAAGAAGACCTGGTTCTCCATTCTGAGAAGAAATCGACCTTTAAAGGG
TAGAATTAAATTAGTTCTCAGCAGAGAACTCAAGGAACCTCCACAAGGAGCTCATTTCCTTTCCAGAAGTCTAGA
TGATGCCCTTAAACCTTACTGAACCAACCAGAAATTAGCAAAATAAGATAGACATGCTGGATAGTTGGTGGCAGTTC
TGTTTATAAGGAAGCCATGAATCACCAGGCCATCTTAAACTATTGTGACAAGGATCATGCAAGACTTTGAAAG
TGACACGTTTTTCCAGAAATTGATTTGGAGAAAATAAACTTCTGCCAGAATACCCAGGTGTTCTCTCTGATGT
CCAGAGGAGAAAGGCAATTAAAGTAAATTTGAAGTATATGAGAAGAAATGATTAATATGAAGGTGTTTCTAGTT
TAAGTTGTTCCCCCTCCCTCTGAAAAAAGATGTATTTTACATTAGAAAAGGTTTTTGTGACTTTAGATCTA
TAATTTATTTCTAAGCAACTAGTTTTTATCCCCACTACTCTGTCTCTATCAGATACCAATTTATGAGCAATCTT
GCTATAACTAAGTGCTTCTCCAAGACCCCACTGAGTCCCCAGCACCTGCTACAGTGAGCTGCCATTCCACACCC
ATCACATGTGGCACTCTTGCCAGTCCCTTGACATTGTGCGGCTTTTACATGTTGGTAAATTTATTAAAGATGAA
GATCCACATACCTTCAACTGAGCAGTTTCACTAGTGGAAATACCAAAGCTTCCACGTATATCCAGAGGTT
TGTAGATAAATGTTGCCACCTTGTTTGAACAGTGA AAAAATGAAAACAACCTGGAAAGTCCAGTGATGGGAAAAAT
GAGTATGTTTCTGCTCTTAGATTGGGGAACCCAAAGCAGATTGCAAGACTGAAATTTCAAGTGAAGCAGTGATTT
GCTAGGTCATACCAGAAATCATCAATTGAGGTACGGAGAACTGAAGTGAAGGTAAGAAAAGCAATTTAAAGT
CAGCGAGCAGGTTCTCATTGATAACAGCTCCATCTGCTGAGATACAGGGAATGGAAGGGGGGAAAGCTGGAGT
ATTGATCCCGCCCCCTCTGGTTGTGACGCTCCCTGCTCTGTGTGGGGCGGAACATAGTCCAGCTGCTCTATA
GCAAGTCTCAGGTGTTGCAAGTAAGAGTCTGCGCATGACGGGAACAGTGAATGCCAACAACCTTAAAGCAATT
CGATGTTTAAAGTATAGTACTCTTTTTTTTAGACAGCGTTTCGCTCTGTTGTCGCGAGTACGATCGAATGTT
GTGACCTCGGCTTACTGCAACCTCCGCTTCCAGATTCAAGCGATTCTGCTGCCCTCAGGCTCCCAAGTAGCTAG
GACCAAGGTGCGCGCCACACGCCCGGCTAATTTTTGTATTTTGTATTTTGTAGAGATGGGGTTTCCCAATGTT
CGAGCGTAGCTGAATCTGTGACCGCAAGCGATTCAACCACTGAAAGTGTGCGGATTACCGGC
TTGAGCCACCAACCCGGCACAATCTTCTTTTATGTAGTAAAGATATAAGGCCACACATGGTTATTTTGA
AGTATTTTATAATTTAAAAAATACAGAAGCAGGAAAAACAATTTAAGTTCAGGTGAGGATGATGGTTGCTTG
AACCAAGGGTTGCAATGTAGTAAGAAATTTGTGATTTAAGATATATTTTAAAGTATAAGTAGCAGGATATTTGA
TGGAGTTTGACTTTGGTTTTGGGCCCAGGGAGTTTCAATGCTTTGAGAAATGAATGAATAGAGAGAAAAATAA
AAGAAAAACCGAGCAGGCACATGGCTCACACCTGTAATCCAGCGCTTTGGGAGGCTAAGGCAGGCAGATCACT
TGAGACCAGCTTGGGCAACATGSCAAAGCCCCATCTCTACAAAAACACAAAAATTAGCTGGCAATTGTGGCGCA
CACTCTGATTTCCCATCTAGTCAGGAAGCTGAGATGGAAGAAATTAATGAGCCACAGAGTTCAAGGCTCGAGTGAG
TCGTGATTTGCCACTGCATCAAGCCGGGGTGACAGAAGAGACCTTGTCTCGAAAAAGAAATCTGAAAAACAATGG
AACCATGCCCTCAATAATTCTAGAAAGTTATTTTCAACTGATAAATCTATATTTACCCCAAATTAATCAAGGGTGAAG
GTAAAAATAACATATTTTAGACAAGCAAAAGCTCAGGGGTTTACCTCCATGGCCCTTTTAGGGAAAGCTTTGGA
GAAAACTCCAGCAAAATGAAGGAGTACACAAACAGAGAATGACATGAATCCAGCAAAATAGGATCCAACACAG
GCAATATTCCAGTATGGAGCTAGCTTTAAAAAGGAACAGTAAAAATTAATCGGTTAGCTGGGTGGAATGGCC
CATCGCTGTAGTCCAGCTACTCAGGAGGCTCAGCAGCAGGACGACTTGAGCCGAAGATTTCCAGACAGCAATGG
CCACCTTAGTGAGATCCCTCTCTTAAAAATAAATCTTATGCCAGATTGGGCGATTGGAAGAAGATTCTATT
GAAGATAAGCAAAAGTAAAAAATAAAAAAAGGGAAGGGTTAGTTAGGCAATCATTTAGGCA
GAAAGAAGTACAGGATAGGAAGAGCATATACTGTTTTTCTCAACAAGGAGCAGTATGTACACAGTCATAATG
ATGTGACTGCTTAGCCCTTAAATATGGTAACCTACTCTGGGCAATATGGGAGGAAAAGTGAAGATTGTGATGGT
TAAGAGCTAAATCCTCATCTGCATATCCAGAAATCACTATATAATATAAATGAAGTGAAGTATGTG
AGGAAAAAACAGAGACATTGCTTAAAGAGTTAAAGTCAATGCTCTGGAGAAATTAGGAGGATGCTGGACAGGG
ACTGTAGGATGCATTATAACTGAAAAGCCTTTTTAAAAATTTATGTATTAATATATGACTGCTTGAAGAAC
TAAAAAATAACAAATTAATTTGGAAAAACCCATGAAGGTAACTAACCGAGGAAAAAATGAGAGAATGAAAGTATT
TGCCTCTGGAAGAACAACAGTGCACGAGCTGTTGTTTTTCAATGTAAGACTTTTGAGCGCAATTTAATGTACTTAA
CATTTTCACTATTTCTTTAATAAGAACAATTCATCTATAAAGAGTACACTTTGTAATA

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FIGURE 1641

TTACCTTCTACTGAAGAGGTTGTGGTCATTCTCTGGAATATCTGAATTCATTCTGAGCGGTGCCAGGGCAGG
TCCCCGTTCTTGCCGATGCCCATGTTCTGGGACACAGCGACGATGCAGTTTAGCGAACCACCATGACAGCAGCG
GGAGGACCTCCGAGCCCGCTCGTTACAGCAGAACGCGCGGTCAAGTTTGCGCGCAAATTGTGGCCGCCCGCCCC
CTCGTCCCTATTGTGCAGGCGAGGCCCGCCCCCGCCCCCGCGCGCACGCAGGGTCGCGGCGTGCTCGCGCCCG
CAGACGCCTGGGAATGCGGCCG

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FIGURE 1642A

CTCCAATACCGCAGGAGGGCGGTCTTCCCGGCTCGCAACTCGGTGCTCTGGGGGATTGTCGCGCGTAAAGAA
GCTGCGCGGTATGCGCGGTGAGGTGAGGTTCTCAGCACCAAGAGTGCAGGGTCTCGTGGTCTGTTCCCTCTGGCC
TGGCGGAACCTTGGCTGGGAAGCTGGGAGGACAGAAAGGCTTGGGCTCCCTGAGCTGGCTGGGAGCGGCGGCG
TGCTAGGGGCGGCGACCTCAGCTGTTGGGCTCGGCTGCTGGGGGCTGTGCGTCCAGCCGCGCTGGAATCCGCG
TGTGGGTGGGCGGCTTGGCTCTCCCACTTCACCCCTCTTGATAAACCAGAGCCCTCCCCCTTCCCACGTACGTAGGG
GAAGAGTAATCTACTTCTCTTTGAACAGCTTCGGTCCCACTTATGACAGTCGCATATAAAGCTTTCAGCGAAGAGTGGC
CTGGTAAAGTGGCATGGAGTTTCTCACCAATTCATTGGGTCCACCCCTTTCAGCTTCTGTGGAAGGGGTCTTCTT
GTTACTAGGAGCTGAGACTTGGGGGGTTCGACGGGATGCTGGTCTTAAAGGATGATAATTTAGGCCGGCGCGGT
GGCTCAGCCTGTAATCCAGCACTTTGGGAGGTGAGGCGGGCAGATCTCCTGAGCTCAGGAGTTCGAGACCAC
CCTGGGCAACATGGTGAACCCCTTCTCTACTAAAATACAAAAATTAGCTGGGCGTGGTGGCAGCGCGCTGTAA
TCCGAGCTATTTCGGGAGGCTGAGGCCGAGAATCGTTGAGCCCTGGCGGCAGAGGTTGCAGTGAGCCAAGATCG
CCCCTGCACTCAGGTTGGGCTACAGATGAGACTCCGCTCAACAACGACCACAACAACAACAAAAAGGTGG
TGGCTTAATACAGCCATGCTCCCTTAAAGAACTGGTATAGTTATGAGAAATGGTTGGGCGGTTTCTGTTGTTGTG
GAACATCATAGTGTACTTGCACAACCTACAGAGCTGGGCGGTATGGGATAGCTGTTACTTCTAGTCTACAGAC
CTGTACAGTATAACTACTAAATACTGTAGGCAGTTGTAAGAGGATGGTGTGTATCTAAACACAGAAAAGATAGT
TAAAAATATAGTGTAAAAAGAAAACTGGTACAGCTGAATAGGCACTTACGATGAGAGTTCGAGGGCTGTGCGT
AGCTATTAAGTGAAGTGAAGTGGTATGTGAGTGTGAAGGCCACGATATATTATAGGGTATTACTGTACACTA
CTGTAGAGCTTTATAAATGCGGTATGCTTAGTCTAAGTTTATAAAAATAAGGTAATACCTTAGCTTACTGTGCT
TTTTTAACCTTTATAAATCTTTAAATTAATTTAACTCCTTGACCTTTTTTTTTTTTTTTTGTAGCGGAGTTTATTC
TCTCTGCTCTCATTTTTGAGACAGAGTTTTGCTCTTGTCACCCAGGCTGGAGTGCAGTGGCGCAATCTCAGCTCT
ACTGCAAGTCCACCTCTTGAGTCAAGCGATTCTCGCTCAGCTTCCGAGGTGGTGGCGGCTGTAGCTGGG
ACTACAAGAGTGGCCACCACGCCCAGCTAATTTTGTATTTTGTAGTGAAGTGGGGTTGACCATGTTGGCCAG
GATGGTCTCGATATCTGACCTTGTGATCCACCTGGGCTTGGCTCCCAAAGTGTGGGATTACAGGCGTGAGCC
ACCATACCCGGCCCACTCTTTTGAATAACACTTAGCTTAAATGCTAATGTGTGTATAGCTATATAAAAAATAT
TTCTTTTATCCCTTACATTAATCTATAGCTTTTTCCTGTAAAAATTTTTTTTGTGTGTATAAACTAAGACACAC
ACATTTGGCTACACCGGCTGAGGACATCAATATCACTCTTTCTTCCCAACTCTTGCTCCTACTGGAAGGTT
TTCAGGGGCGATTAACATGAATGGAGCTGTCATCTCCTATAATACTGCTTTTTCTGGAATACTTATAATGTGCT
AGTATTATGTACAGTACATCATTTGAAGCATTATGCTTGTATATGACTGGCATCCGAGGTTTGTGTACACGACA
TTACACAGACATGAGTAATGTGTTACACTACAAGTTATGAGGGCTACAAGTCAATAGGAATTTTCTGCTCCA
TTATAATCATCTGAGACCATGATCATGTGTGAGTCTGCTGTTGACCTAAATGTATGTAGTACTGTGACTAGCTGA
TGAATCTTTGATTATGGTCAATGTCTCTATTCTTACAGGAAAAAATACTCCCAAACTCACTAGTATAGT
AAGTGACCAAAACCTTTTTTCCATTTTATGTTGGAGCCAAATCATTAGTGTAGGATAAATTAATCTTATGTAT
GTGCTCTAAAAATGAAAGTATTCTCGAATATTAAGCATATGTATTAAAGATATAAAACCAAGATACAGATTTT
GGTGTGAAATATATCTTATGATTCATCAAGTCAATTAATTAATAGAAATGAAGTATGTAATCACTGGAGCTGGAA
GTAGCTTATACCTTGATTAGTAAGAGGAAGCCCGGGATCATCTGTGATGGTAAACACTTTTATATGTTTAACT
ATAACTTTGGCAGGAAATTTCAACAACTTCATATTAAAGGACATGATTTCTGTACTTAGTAACTGCTATGC
AAATTTGTCATTGAAATGGCAGACGAAGCAAGAAGATTGGGAGAAAGTACTGTGGGACTTGGAGATAGGAAAA
TAAACAGCGGGGAAACTGCAAGATGTGGGAGAAATAATGCAATCTTGTATTACTATCTGATTATATTTAT
GAAATAAATTTGGTTTCTTAAGATAGTTTTCATTTTAAAGCACACCTTTTTTAACTGCTGTGGCAGCTTTCTCG
TAAGTGGTAGATTATGTTAGAAAGCATGTCTATGAGCATATATAGCATTAAATATGTATACAGATATCTAACT
GAAATAAAAAGTGTTTTTAATAATTAAGAGTTTAAACATATGGGCATATGTGACATATAGTGATATAGCATGCTCT
TTAGTTTGTGTTGTTTGTGTTGATGGCTAACCACCCATCTGTGCTTAAAAATGATAAGGTACCACTGATGA
AATATGACAGGAGTGGGCGGAGTGTAGTACCACATATAACAAGAGACCTTGCTGCAACATCATGGGAGGACAT
GAAGAGGAGTCTCTTGGAGGAAACAGCCAAACCTACCAAGCGTAAACAACTGTGAAGCCAAATAGGCTATCCCT
CAAAAATGATGACCCCAAGCAAAACATAAAAAGAACAAAAAGAAAGAGTACTTAAATGAAGATGTGAATGG
ATTCATGGAATACCTAAGACAGATTTACAGATGGTTCACAAATGGGCAAAATATAGCAACGACAGTGGAGGAG
AAGGGAAGAAATTCAGTTGCTTTAAAGAAAGACAGTCGACGGGAAGGAAGATTTAAAGAACAGTGGCGCAA
GAAAAATGCAATGGTGTGTTTCCATTGTAGAAAACTGGTCTATGGAATTCAGATATGCCCGCGCGCCTTGAAA

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FIGURE 1642B

TCAAGACATGGGCACCTGGGATATGTTACAGGTGTGGGTCCACAGAGCACGAAATAACCAAGTGTAAAGGCTAAAGT
AGACCCGGCTCTTGGCGAATTTCCCTTTGCAAAATGTTTTGTTTGTGGAGAAATGGGGCACCTGTCTAGATCTTG
TCCTGATAATCCCAAAGGACTCTATGCTGATGGTGGCGGTTGCAAACTTTGTGGCTCTGTGGAACATTTAAAGAA
AGATTGCCCTGAAAGTCAGAATTCAGAGCGAATGGTCACAGTTGGTCGCTGGGCAAAAGGGAATGAGTGCAGACTA
TGAAGAAATTTTGGATGTACCTAAACCGCAAAAACCCAAAAACAAAATACCTAAAGTTGTTAAATTTTTGATAACA
GCTAGCACTATCATGAGTTACTACCTCAITGTTACTTTCTAAACCAGGCCCGCTTCACGAGTTAGAGTTGAGCTC
CCCTGTAGCCAGGACTATGCTGTAGATATCAGTATGATCTGGGTGTGGCCAAAAACAATTTCTTTATTCTGTCT
ATCAAATAGTACTTCTACCACTGTTTGGAGAAAAATTGAAGAAAAGAATAAGATGATTAATGAATTCCTCTAAAG
AACATATTTTAAAGAGACAGAAGCTTAGACATAACCAAGTAGTTGTATACCTGATTGTAACAATCATCTTTTATAAA
AGCAAAATTTATGCATAAATGTAAACACCCCTAAACAAAGGGAACAAATGAATTTTGGTTATATTGTTTTCTTG
GCTCAAAGTATCAATTTATATTATAATAGAAATTTATAAGTTGCTAGAAAGTCTATATTTTAAAGTACGGAAT
AAAAATAGTTTTCTATTAAAGCAATAGAAATATTTTGTGTATAATTTTCTGAATACTTGATTCTCGATTGAAA
TATCCATTGTCTGTTAATATCCATGTAAACATCCCATGGAAACAAGATTTTTTGAATCTTAGATGAGAATAAA
CAGGGATTGGTTTTTGTTTTAGTTTTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1643

MTRWARVSTTYNKRPLPATSWEDMKKGSFEGTSQNLPRKQLEANRLSLKNDAPQAKHKKKKKEYLNEDVNGF
MEYLRQNSQMVHNGQIIATDSEEVREEIAVALKKDSRREGRLKRQAAKKNAMVCFHCRKPFGHIADCPAALNQ
DMGTGICYRCGSTEHEITKCKAKVDPALGEFFFAKCFVCGEMGHLSRSCPDNPKGLYADGGGCKLCGSVEHLKRD
CPESQNSERMVTVGRWAKGMSADYEBILDVPRKPKTKIPKVVNF

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FIGURE 1644

GGGGAGGCTGTGATGGGTGACAGGTGCGTGACAGTGGGAGCTGCTCTCGGCACAAGCATTGTACGGCAAAGGCAA
GAGTAACAGCAGCGCCGTCCTCCGACAGCCAGGCCGGGAGAAGTTAGCACTCTACGTATATGAATATCTGCT
CCATGTAGGAGCTCAGAAATCAGCTCAAACATTTTATCAGAGATAAGATGGGAAAAAACATCACATTGGGGGA
ACCACCAGGATTTCTTACATTTCTTGGTGGTGTATTTTGGGATCTCTACTGTGCAGCTCCAGAGAGACGTGA AAC
ATGTGAACACTCAAGTGAAGCAAAAGCCTTCCATGATTACAGTGTGCAGCAGCTCCCAGTCCAGTGCTAGGAAA
CATTTCCCCAGGAGATGGCATGCCAGTAGGTCTGTACCACAGGGTTCTTTCAGCTTTTATGTACCTCGGTA
CCCTGGAGGTCCAAGGCCCCCATTTGAGGATACCTAATCAGGCACCTGGAGGTGTCCAGGAAGTCAGCCATTACT
CCCCAGTGGAAITGGA TCCAACTCGACAAACAGGACATCCAATATGGGTGGCCAATGCAGAGAAATGACTCCTCC
AAGAGGAATGGTGCCCTTAGGACCACAGAACTATGSAGGTGCAATGAGACCCCCACTGAAATGCTTTAGGTGGCCC
TGGAATGCCTGGAATGAACATGGGTCCAGGTGGTGGTAGACCTTGGCCAAACCAACAAATGCCAATTC AATACC
ATACTCCTCAGCATCTCCTGGGAATTATGTAGGTCTCCAGGAGGTGGAGGGCCACAGGAACACCCATCATGCC
TAGTCAGCAGATTCAACCAACTCTGGTGATAACATGTATACTTTAATGAATGCAGTACCTCCTGGACCTAACGAG
ACCTAATTTTCCAAATGGGTCTGGGTGAGTGGTCCCATGGGTGGATTAGGAGGAATGGAGTCACATCACATGAA
TGGCTCTTTAGGCTCAGGAGATATGGACAGTATTTCCAAGAATTTCCCAATAATATGAGCCTGAGTAATCAACC
GGGCACCTCCAAGGGATGATGGCGAAATGGGGGGAAATTTCTTAAATCCTTTTCAGAGTGAGAGTTACTCCCCTAG
CATGACAATGAGCGTGTGATCCATTACCAAGTCTCCTCATGAAAACCAAGTGAAGTGCAGCCCTTCACAGAACTAC
TACGGAAGAAAATTATTCATCACAGTGTACAGTTAAACAAGGAATCTCAGTCACACCAACCAACCTTTTATT
TCCTGCTCTCTCCCTCTTTTGTGAAGAAAGCGGGTCCAAATGTGATTCAAACCACTGTACGGAGTGGCATATTA
GAATTGCCCTAAACTGAAGTGC AAATAATTATGTGTGTATGTATGTGTGGGAAAGAGAATGTACTGTATATGT
GTATGTTATACAGACATATACACATACATACATTGACCCACAGGACATTGTAAAAATTATTCACATGACATCTTA
AGTAGAAATAAGTAGGGACTTTTATCCATCCTTTTTTTCACGTTTACATTTTAAATTATTACAAGTTGCTCCTGC
CCCTCCCTGAACATAATTTGTGCTGTGTATATCACTGCTTTATATAAGTTATTTTAAAGGTGAACTCAGATGTT
ATGTTTGTGTAATGTCTGCAATCATGGATAGGAATAAAATCGCTTATTTGAGAGCTTTC

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FIGURE 1645

MYGKGKSNSSAVPSDSQAREKLALYVYEYLLHVGAQKSAQTFLSEIRWEKNITLGEPPGFLHSWCVFWDLYCAA
PERRETCEHSSSEAKAFHDYSAAAAFPSVLGNIPPGDGMPVGPVPPGFFQPFMSPRYPGGPRPPLRIPNQUALGGVF
GSQFLLP SGMDPTRQQGHPNMGGPMQRMTPPRGMVPLGPQNYGGAMRPPLNALGGPGMPGMNMGPGGGRPWPNPT
NANSIPYSSASPGNYVGPPGGGGPPGTPIMPSPADSTNSGDNMYTLMNAVPPGPNRPNFPMPGPGSDGPMGGLGGM
ESHMNGSLGSGDMDSISKNSPNNMSLSNQPGTPRDDGEMGGNFLNPFQSESYSPSMTMSV

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FIGURE 1646A

GAATTCCCGAGCTCTCTGGCGGCTCTGCTCGCAGTACACAGACACTTGAGCACACGGGTACACCCAGCAGACTTTCGGG
TCTGCTATTGGGATGACTTTGGAAGGTTCTGTGTGGCTGCGCTGGCTGCAATTTGTAATCAGTGGGAGGAAGCACT
TCAACGTGGCGAGCAAGTAAGATATATGTTGTATTTTCTTTTCTCTCTCTCTCTTCTATGAAGAAGGAAAAAT
TCCCAGGCACTATCTGATCGGCTCTCTCTTCAACGAGCAAGTAAGCAAGAAATTTGGGAATCGTACGTGCGAAGT
GCTGAAGAGGAGATTTGTTTGGAGGAAACAGGAAGAGAAAGAAAGGAAAAATACATATTTTCAGGGA
CGAGAGAGAGAAGAAAAACGGGAGCATATGCGGAGAAAAAATTCAGATTACGAGGATTATGGATGAACGTAACA
CAGAGGTGACATTTACAAAGAGGAATTTGGGTTGATGAAGAAGCGCTTATGAGCTGAGCGGCTGTGTGTAGCTGTG
AGATTGCGCTGATCATTTCTCAACGAGCACCACAGCTGTTCCAGATTGCGCAGACCGACATGACAGCAATGAGCTGCTT
TCAAGTACACGGAGTACACGAGCGCGCATGAGAGCCGGGACAACTCAGACATCGTGGAGACGTTGAGAAGAAAC
GCCTTAAATGGGCTGTGACGACCGCCACCCCGATCGCGACGATTCCGCTAGGTCAGACCCCTGAGTCTGAGGACAAGT
ACGAGGAAATTAACGAGATATGATCTAATGATCAGGACCGAAGATTGTGCTGTCTCCACTCCCAACTCG
AGATTGCCAGTCTCCATCCCAAGTGTCCGACGACACACAGCTTTGGTGTCAGACAACTCTGTACGCTCACTGGGAACCC
CCAACTATTGCGACTGGCTACCTTCTCTCGCAGGAAATAGTATGTCTCTGGTGTACACATCGACTCTCCAA
GTGCAAGTAAACACAGGTGGTCTGATGGGTGGAGACCTCAGCTCTGGTGCGAGCCAGCTGCAGGGAAACGGGTATG
GCAATCCCGAAACTCACCAGGTTCTGTGGTCTCAGCTGGTAAGTATGCAAGAGAATATGCAAGCAAAATCTCTCT
CCCAAATGGAATTTAGGAATGAATACCGGTAAACGACATCTCCGAGTTCTTATTCACCAAGCGACGAATACGA
TGCCATCAGTGTCTGAGGATGTCGACCTGCTTTTGAATCMAAGGATAAAATACTCCCACTCGGCTCAGTCATTGG
CTACCCGAGTGGTTTCCGTAGCAACTCTCACTTTACCCAGACAGGAATGGGAGATATCATTCAGCCATTTCAA
CACATATGTTAGCCAGGACTCTCTGTAGTGTGACAGCTCATCTCTGTGGTTTAAACACGCCAGCGGCTCT
TTCACTTGTTTCAGTAACTTGGCTGGCAACGACCAACCTCATACAATGCCAACCTGCTCCCTCAGTCAGTCAGTTGG
GAGCTTGCATCTCACTCATTTTCTCAGAGTTCAAATCTCTCCCTGCTCTTACTCAAAGCTCAACATCAAGT
CAGAACTGTCTCTTCTAGAGACGCTACCAACCCCTTCGAGATACCAACACACACCGCCAGCGGGCGG
GGAGATCTCTGTTGACAGCTGTGACGCGTGTAGACATGCTGACAGCGGAGCCAGCAGAGGATCAGCCGAAGC
AAATTCACCTCCCAACTGGAACTCAGCAGACTTCCGGCGAGGAAAGCTGGCTTCAGTCAGCGCATCGCAC
TTTCTGAAGGATGGGCAACATGATCAGATTATTACTTACTAGTTTTTTTTTTTTTCTGCAAGTGTGTGTGTGTC
TATACCTTAATGGGAGAGGGGGTGATATGCATTATATGTGCCGCTGTGGGAAAAAAAAGTCAGGTACTCT
GTTTGTGAAGAAATTTTAAATGGCTCAGTGAACAGTATAAGATAAACAAGAACTCGAGATAGACTTAGC
ACTTGAGTTGTACACAGACACTTGTACAAAATAGATTTTAAAGGCTAACTCTTTTTCAGTTGTGTGCTCTTTG
CAAAATGTATGTACAATAGATAGTGTCACTTTCAGGTTCAACGTTTACATGTAAATAGACAAGGAAGAA
ATTGGCAAAAGCGCGAGATCTTACTGAAAGAGAGAGCAGCTGTTATGCAACATATAGAAAAATGTATAGATGTC
TTGGACAGACCCGGTATATGGGTGGCCATGGTAAATGTTGAAGAACACACAGGTCACCTGACATCCCAAGAAATG
TCACAACTCGCGGCATATCTGGCGTATGGCACTATTAAAGGATCAGAGACCATTAAGAGAGGCACAT
CCTATTAAGAAAAATGTGGAGTTGGAGGCTACATATTTAAATTAATAAATAAATCTGGGCTGCACT
CTTATTAATAAATAAATAATATGATACATTAATTTGCTTATTTTATATAAAGAGTAAGACAGATTTTC
AAAGCATTTGGGGTTTTTGTAGTTTCACTTAAGCCAAATGGTTTTTCCCTGTAGATGCTGCTAATTT
TAAACAGCTCTGTAAAAACCAAAAAGGACTTTTGTATAGAAGACACTACCTTAGCCATAGAAGACTCCATGT
TTTGCTAACCAAGATAACIGTTTTCTCTTTGTAGAAGTTTTGTTTTGAAGTGTGATTTCTAATATATAAAT
ATTAAGAATCTTTAAAAAAATCTGAAATTAACATGCTTGTGTATAGCTTTCTAATATATAAATATTATGTT
AATGACAGAAAGTTTGTATATCTTAATGCGGAGAGGGGGATATTTGTGCAATGTGCATTTTGTAGTAACTATTT
CTTCTGTTTTCTTTTACTGCTGCTACATTTTATAAGTTTAAGGCTAGCTGCAAAAGATAACTGTGGGGTAT
GAACATATCACAATTGCAACACCTTAATGTTTTTAAATACATTAGCAATCTATTTGGGTCACTGACATCCATTGT
ATATACATGTTCTTTCATGCTATTTTATTTGTTTTTGGCATTTTATCAAAATGCGGGGCCCTTTCTGTACT
CACCATTTACCATGCATCTGGAATCAGTAAAGTGCAATCTCACTTGCCATCTTAATCACTCTGGTTGG
TTTCAGGCTAGAATTTGATACGCTTTTGAAGAAATGCGGCAAGTAAAGACTATGTTGGGCGACATGCTGTG
CAAAATGCGCCTAGAACAAGTGAATAGGAATTACCTTGCGTAATAGTTATAAATCCCAAGAGAAAAAT
TGAAAGACTGGGTGCTAGACAGAGAGGAAGCAGGTTAAGGATAGTTGCTTTGTACCTGGTTTTTAATATTTTA
ACTGCACTCTGACAACTTTGTGCACATATAGGACTGTGAAACATCCCGGTGTGTCAGGACCCGCAAAATGTCAT
TTGCTGATAAAGAGATGTATGCACTATTTTTTCTCAATAAAGAGATTTAATAGCCATTCAAGAAATCCCAT

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FIGURE 1646B

AAGAACCTCTCTATGTCCTTTTTTTAAATTTAAAAAAATGACTCTTGTCTAATATTCGTCTATAAGGGATTAATT
TTCAGACCCTTTAAATAAGTGAGTGCCATAAGAAAGTCAATATATATTGTTTAAAAGATATTTTCAGICTAGGAAAG
ATTTTCCTTCTCTTGGAAATGTGAAGATCTGTCGATTTCATCTCCAATCATATGCATTGACATACACAGCAAAGAAG
ATATAGGCAGTAATATCAACACTGCTATATCATGTGTAGGACATTTCTTATCCATTTTTCCTTTTACTTGCAT
AGTTGCTATGTGTTTCTCATTGTAAAAGGCTGCCGCTGGGTGGCAGAGCCAAAGAGACCTTATTAAGTAGGCTAT
ATTTTCTTAACTTGATCTGAAATCCACAATTAGACCACAATGCACCTTTGGTTGTATCCATAAAGGATGCTAGC
CTGCCTTGACTAATGTTTATATATT

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FIGURE 1647

MGRKKIQITRIMDERNRQVFTTKRKFGLMKKAYELSVLCDCEIALIIFNSTNKLQYASTDMDKVLLKYTEYNEP
HESRTNSDIVETLRKKGLNGCDSPDPDADDSVGHSPESSEDKYRKINEDIDLMSRQRLCAVPPNFEMPVSIPVS
SHNSLVYSNPVSSLGPNLLPLAHPSLQRNSMSPGVTHRPSPAGNTGGMLMGDLTSGAGTSAGNGYGNPRNSPGL
LVSPGNLNKNMQAKSPPPMNLGMNRRKPDRLVLIPPGSKNTMPVSSEDDVLLNQRINNSQSAQSLATPVVSVAT
PTLPQGQMGGYPSAISTTYGTEYSLSSADLSSLGFTASALHLGSVTGWQQQHLNMPSPALSQLGACTSTHLS
QSSNLSLPSTQSLNIKSEPVSPPRDRITTPSRYPQHTRHEAGRSPVDSLSSCSSYDGSREDHRNEFHSPIGLT
RPSDERESP SVKRMRLSEGWAT

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FIGURE 1648

ATGCAGGCCCGACAAGTAATGCTAGCAGTGGCAGCTTTATAGCCACGGCTGCACAGAAATCAGAACATTTTCTTTA
GATTTTTTGAAGAAGCGCATCTTTCAGATTACACAAGCAGGATGACGCTGGCTGATGATGTAACCCITGGACGAC
CTGATCATGGCTAAAGATGACCTCTCTGGTGTGACATCAAGGCAATCTGTACAGAAGCTGGTCTGATGGCCTTA
AGAGAACGTAGAAATGAAAGTAACAAATGAAGACTACATTGACTTTTCTAAAATAGAAATCAGGGAAGGTTAA

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FIGURE 1649

MQARQVMLAVALYSHGCTEIRTFSLDFLKKRIFQIHSTRMTLADDVTLDDLIMAKDDLSGADIKACTEAGLMAL
RERRMKVTNEDYIDFSKIEIREG

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FIGURE 1650

TTTCCTCTTTCTCTAAGAGTCTCTCTCTCCCTTTCCCTCTCTCTCCCCCAATCTGTCTTTCTAGCATGTTGCC
TTTTCAACCACATTTGTGTTTCAGGTGTAGAGAGGAGAGAGAGTGAACAGGGAGCGGGCTTTTGTCTGTGT
CTCCCTGGACTGAAGAGAGGGGAGAATAGAAGCCCAAGACTAAGATTCTCAAAATGCTTTATTACCCAGAATCTT
TGTCTGGGTGAGTCAAGAACCATTTCCAAACAAGGACATGGAGGGAAGGCTTCTTAAGGGAAGACTTCTCTGCC
AAAGGAAGTGAACCGCAAGAAGAACGATGAGACAAACGCTGCCCTCCCTGACTCCACTGGGCAGCAGTGAATCCG
CTCCCCAAGAATCAGTTACCTCCACTTTTTTAAATCGTAACACCTCCATTGTATTACATATGGTGTATGGGTAT
TGATGAGGTGATGGTATCATATATGGGATTTTTTCTGTGTAAATCATCAAGTATAAGAAGAACTATGGGACTC
TGAGCCTTGCTTTAGAGAATTTACAGTGGACAAATAGGTGTCTATCAAAACCAGTTTTTAAATCATTCTGACTCAAGT
GAAAACGCTCAGAATTTACACTGTGAATCCACGTTTCAACCCCTTACAGGTGGGCCTTCAGGCCTGGTTCGCTA
CAACAATGTCTTCCACAACCTCAAACCTCCACCGCGCTCACACAACCCGCTCCACTCCTGCCCTTTTCACTCACAG
CTCCCGACTGCTTCTTGAGAGGCTGAGAGTCCCCCCCCCACCCTTTTTTTTTCATTTAGATGTAACAAACCTAG
TAGTTATGTTCATCAATTTGCTGTATATCTCTATATTTTATCCATGTACTCTTTTGATGTATAGAAGTAGTTTG
AAACTCATTGTTTCTTTGGTAAAGTGACCGAGATGCTGCCACAGGACCTGAGACACTGATGAATGGTCTATTT
TGGACTTTCAACATGCTCCTTGGCGAGGTAGCTCTGATGGAGTTATTTTTATTTCCATGTTCTAAGAAGGTGTT
GGTACTCTGTTTCCCTGAATGTTGTTCTCTAGACTGGATTGACTTGTTTTCCCTTGIGTCTTCAGTGIGGCTTTCT
TCCTCAGTGTGTAGTTGAGCGAATGCTACCAGAGTGTGAGAGACCATGTCTCGTTGGCTGGCGCTCACGGAC
ATGCAGTCACGGTAGCGGGAGCAATCACAAAAGTGAATTTACTTACCAAAATCTCTTCCCTTCCGTAGCCTCGCC
TGCCGTGACTTAGAGAAAGAAAAGCAATAATTTACAGGCATTTTGAGGTGTCTCTTTGGGTTCTTTCTGTTGAA
AGGATATTTGTGAAAAAAGAGCAAAACCGTTTTAAATAAACTCCCCCTGGAAAAAAACCCAAAACACTGGCAT
CTGAGTAGGAATATGAAAATGACACCTTTTCCAATATTTAAATTGGAACAAGGTCTACAAAATCATGATACTT
TTTTAAAAGGCAGAGCATTTCTTTTTTCGGCAATTTTGATAAGCAAGGTGTAGATTTACATTTTGTCCCTTGTCTC
CAACGAAATGGATAAACAAAATAAATTACCATCTACTCATGGAATGTTGTTGTTAGCCAGTCTGAAAGCCCA
CCTTAATTTTTATATAACTGTCTTTAGCTCTTCTTTTGACAGGGCAGGCCTTGTCTGAACCTGTTTCGCTTCTGA
CTGTTAAACACCGATGACGCATGCACTGCACCTCTCGTTTTCTTCTTGTCTCCCCCTTGGCCTGAGTTCTTGT
GCATTACTCTCTCCCTCCTTCGTTAGAATAGGTATATCAGCTGTGTAATAGAGCAAGAAAACAGTATCTGCA
TCTGTGGCATTTATGTAGAGTTGCAGTTGTGTACTGCTGAAAAATGCAGGCTTTTGTAAACAGTGTGATCTTTACTG
ATGCACTCATGACAAGTACCAATGTATTTTAGCTATTTTAGTAGTATTTGTTCAATAAATACGCAAGCTGTAAAG
GTAACGTCTGCTG

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FIGURE 1651

MVYYPELFVWVSQEPFPNKDMEGRLPKGRLPVPKEVNRKKNDETNAASLTPLGSSELRSFRISYLHFF

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FIGURE 1652

TTTTGGCTCTCTGACCAGCACCATGGCAGTTGGCAAGAACAAGTGCCTTACGAAAAGGCGGCAAAAAGGGAGCCAA
GAAGAAAAGTGGTTGATCAATTTCTAAGAAAGATTGGTATGATGIGAAAGCATCTGCTATGTTCAGTATAAGAAA
TATTGGAAAGACGCTCGTCACCAGGACCCAAGGAACCAAAATTGCATCTGATGGTCTCAAGGGTCTGTGTGTTGA
AGTGAGTCTTGCTGATTTGCAGAAATGATGAAGTTGCATTAGAAAATTCAAGCTGATTACTGAAGATGTTACGGG
CAAAAACCTGCCTGAGCAACTCCATGGCATGGATCTTACCCGTGATAAAATGTGTTCATGGTCAAAAAATGGCA
GACAATGATTGAAGCTCATGTTGATGTCAGGACTACCGATGGTTACTTGCTTCATCTGTTCTGTGTGGTTTTAC
TAAAAACGCAACAATCAGATACGGAAGACCTCTTATGCTCAGCACCAACAGTCCGCCAAATCCGGAAGAAGAT
GATGGAAATCATGACCCAGAGGTGCAGACAAATGACTTGAAGACCCAGAGGTGCAGACAAATTACAGTGGTCA
ATAAATTGATTCCAGACAGCATTGGAAGACATAGAAAAGGCTTGCCAACCTATTTATCCTCTCCATGATGTCT
TCGTTAGAAAAGTAAAAATGCTGAAGAAGCCCAAGTTTGAATTGGGAAGCTCATGGAGCTTCATGGTGAAGGCA
GTAGTTCTGGAAGAGCCACTGGGGATGAGACAAAGTGCTAAAGTTGAACGAGCTGATGGATATGAACCACAGTCC
AAGAATCTGTITAAAGTTCAGACTTCAAATAGTGGCAAAATAAAAGTGCTATTG

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FIGURE 1653

MAVGKNKCLTKGGKKGAKKKVVDQFSKKDWYDVKASAMFSIRNIGKTLVTRTQGTKIASDGLKGRVFEVSLADLQ
NDEVAFRKFKLITEDVQGKNCLSNFHGMDLTRDKMCSMVKKWQTMIEAHVDVRTTDGYLLHLFCVGF TKKRNNQI
RKTSYAQHQQVRQIRKKMMEIMTPEVQINDLKDPEVQTNYSQG

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FIGURE 1654

GCAGCCAGAAAAGCTCTGGAGCATCAGGGAGACTCCAACCTTAAGGCAACAGCATGGGTGAATAAGGGCTTCCTGIG
GACTGGCAATGAGAGGCAAAACCTGGTGCTTGAGCACTGGCCCCTAAGGCAGSCCTTACAGATCTTTACACTCG
TGGTGGGAAGAGTTTAGTGTGAAACTGGGGTGGAATTGGGTGTCCACGTATGTTCCCTTTTGCCTTACTATATGT
TCTGTICAGTTTCTTTCAGGAAAATCTTCATCTTACAACCTGTAGGGCTGGTGTAACTTACGACTTCACTAACTG
TGACTTTGAGAAGATTAAAGCAGCCTATCTCAGTACTATTCTAAAGACCTGATTACATATATGAGTGGGACCAA
AAGTACCGAGTTCAACAACACCGTCTCTTGTAGCAATCGGCCACATTGCCTTACTGAAATCCAGAGCCTAACCTT
CAATCCCACCGCCGGCTGCGCGTCGCTCGCCAAAGAAATGTTGCGCCATGAAACTAAGGCTGCCTTAGCTATCTG
GTGCCAGGCTATTGCGAACTCAGATAAATGCTACTCAGGCAATGAAGAAAGAGGAGAAAAGGAAAGTCACAAC
CAATAAATGTCTGGAACAAGTGTCAATTACAAGGATTGTGGCGTCGCTTCAATCGACCTTTACTGAAACAACA
GTAAACCATCTTTATTATTGTCATATTTACAGCACCAAAATAAATCATCTTTATTAAAGT

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FIGURE 1655

CCGCAGCCCATCGGCATGGCTCAAGAGTTTGTGAACTGCAAAATCCAGCCTGGGAAGGTGGTTGTGTTATCAAG
CCCACCTGCCCGTACTGCAGGAGGGGCCAAGAGATCCTCAGTCAATTGCCCATCAAACAAGGGCTTCTGGAATTT
GTCGATATCACAGCCACCAACCACCTAACGAGATTCAGGATTATTGCAACAGCTCACGGGAGCAAGAACGGTG
CCTCGAGTCTTTATTGGTAAAGATTGTATAGGCGGATGCAGTGATCTAGTCTCTTTGCAACAGAGTGGGGAAC TG
CTGACGCGGGTAAAGCAGATTGGAGCTCTGCAGTAACCAAGAACAGGCCCCATGCTGACCTCCCTCCTCAAGAG
CTGGATGGCATTGCAAAATGATGACAGCACTTCTGGTGGATGAATTTGGGGGCACAAACAGCTTTTTTCTCTTTT
GGCTCAGTATTTAAAAGTGGACCAACTTGCTCTTAATCACAGGGCCAGAAGGTTGACGGGCCATCTTGGTTTTC
TTCTGGATGIGCTCTTTGGTTTTTCAGAAAGACTGTGACAAGTTCTGGCCAGGATTCGCTCACTGACCCCTCAATTG
TCCTCTTTGGCATGCGTTTCTTACTGTTCTCCATGTGTCTGGCATGTCTCTACCTCTAAGCCAGTGTTTTTCAACT
ATGTTTATCCAGACTCCTTCTCCACAATGATGAATCCACAGTTGGTTATCTGCTACTGCCATTAGCTAAAATCA
TTTTGCTGCTTGACTTTATGGAGTTTGTATTATGAAATCAGTGGGTATTTTGAATGTGTTCTTTCTAACTACATG
CATCTCTCCACTCAACTCCACCCCATCCCATCCACCTTGAAATCACTGCTCTGAACCAAGTGTTCTCCACCTTG
TCCTCCACAGATCTCATAGGAAATGTTCAACAATTCTGTGAAAGGTCACAGGACCCAATTGGAGAAATCATATGA
AAAGCATAGTTGGTCTTGGTGTATATGGATCAGAGGCACAAGTCAGAGGCTGTGGTCATGCGGAAACACTCTGT
TATTTAAGATGGCTATCCAGATAATCCTGAACACTGTGTATTTATTTTATTAGACTACCAGCAAGATTAAAGC
ATGAAATGTAAACATCTGATAAACTTACAGCCCCCTACACCAAGAGTGTATCTGTGAAAGAGCTCCTACACTT
TGAAACTTAAGAATCCCTTATCATGAAGTTTGCTGTCTTAGAATTGTAAGATTGTTAATTCCTTCAATCTCT
AGTGACAACACTTAATTTCTTTCTAATAAAAAAACCTATAGATGATTCAGT

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FIGURE 1656

ATCTTGGCGAGGCTGCGGTGTCTGCTGCTACTCTCCGAGCTTCGCAATGCCGCCCAAGGACGACGAGAAGAAGGA
CGCTGGAAAGTCAGCCAAGAAAGACAAAGACCCAGTGAACAAATCCGGGGGCAAGGCCAAAAGAAGAAGTGGTG
CAAAGGCCAAAGTTCGGGACAAGCTCAATAACTTAGTCTTGTTGACAAAGCTACCTATGACAAACTCTGTAAGGA
AGTTCCCACTATAAACTTATAACCCAGCTGTGGTCTCTGAGAGACTGAAGATTGAGGCTCCCTGGCCAGGGC
AGCCCTTCAGGCAAAGCACAGAGCTCAAGTAATTTACACCAGAAATACCAAGGTTGGAGATGCTCCAGCTGCTGG
TGAAGATGCATGAATAGGTCCAACCAGCTGTACATTGGAAAAATAAACTTTATTAAATC

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FIGURE 1657

MPPKDDEKKDAGKSAKKDKDPV NKSGGKAKKKKWSKGKVRDKLNNLVLFDKATYDKLCKEVPNYKLITPAVVSER
LKIRGSLARAALQAKHRAQVIYTRNTKGGDAPAAGEDA

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FIGURE 1658

GACTGTACAATTTGTTCAAGGAATTTTTGTAGAAAAATACGATCCTACGATAGAAGATTC TTATAGAAAGCAAGT
TGAAGTAGATGCAACAACAGTGTATGCTTGAATCTTGGATCTGCAGGAACGGAGCAATTTACAGCAATGAGGGA
TTTATACATGAAAAATGGACAAGGATTTGCATTAGTTTATTCATCACAGCACAGTCCACATTTAACGATTTACA
AGACCTGAGAGAACAGATTCTTCGAGTTAAAGACACTGATGATGTCCAATGATTC TTGTGGTAATAAGTGTGA
CTTGGAAAGATGAAGAGTTGTAGGGAAGGAACAAGGTCAAAAATCTAGCAAGACAATGGAACAACCTGTGCATTCTT
AGAATCTTCTGCAAAATCAAAAATAAATGTTAATGAGATCTTTTATGACCTAGTGC GGCAAAATTAACGAAAAAC
TCCAGTGCCTGGGAAGGCTCGCAAAAGTCATCATGTGCAGCTGCTTTAATACTAAATGCATTGTAGCTCTGAG
CCAGGCTGGAAGAACTGTTGCCAAATCAACAGTGCCAGCATTCCAACCTTTGTAAACCTACCAACATCTTAAAT
GGACTTTCCTGTGGTGGTACCCCTTTAAGAGGGCGGATGAAAGCTACTATATCAGTTTGCACATCTCAATCACTTTC
CAGTATCAACAAGAGAGATTTTTACTTATATAATAGTCCTAGAGTTTGCAGCTGGTAAAAACGAGGCTACATCCA
GTATTACTGCTAAGAGACATTCTTCATCCACCAATGTTGTACATGTATGAAAAATGGTGTACTGTATACITTTAACA
TGCCCATACCTTTGTATTGGAGAGTACAATAATGTAATCCTAAAAGCACCACTATTTTAGCATAATAAAAGAAA
GTCCAAAGAGCTCCTATATAGACTACTCCAGATAACTTCGCTTCTTTGATACITGTAGCTTATTGTAATTTTTTT
TAAGAAATTCAGGTCATTATTATTGTACAAAATAAGCGCTTTGATTAAACACAGCTATATAGTTTTTTTAATTTT
TAAAAAACCTGTGGAGACGGTGATCTTGTCTTTAAAACATGATAGTCCTTTCAGTATAATGTCTTAGATTAAAGA
CGTTGCTTTAATACTGTGTGGGAAGGAAATGTCCAGACTTTTCAAATCTCTTATTATATGTTTCCCTTTTTTGT
TTACATAGGGAACAATGTTTATAGTCGTGTGTACAGTGGGGGTCTACAACAAGAAGTGATATTTTCAAACAAT
TTTTAATGATTTAACAAATTTTTGTAATCATTTTCAGGCTTCTGCAGCTGTAGATCTCCTAGTGAAATCCCTTGC
TTGCTCATGCATAAGTGATTTTGAATACCAAAATATACAGGTTTAGTATTTTTGCCTGTTAGTGATTGTTTCACA
TGTGTAACGTTTTGGTTGAGATGTTAAATGGTGGACGAGTACTGTGGATGTGAATGTGGGAAGTAATTTTAAATCA
TATGTAATTTGGTCAACAGGCTAATTTGCAGTAACATATGCTGTTTTATTTAACAATGCCTTGTGCTTTGTATG
CATTAATGTTTGGATGTAAGATTGTGTCTATCCAACAGGGAGCCACAGTATTTAAATTGACCAACCTAATGT
TACAACTACTTTGAGGTGGCCAAATGTAACCTAAAAGCCTTAATTAAGTGGTGCAATTTTGT

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FIGURE 1659

MLEILDTAGTEQFTAMRDLYMKNQGQFALVYSITAQSTFNDLQDLREQILRVKDTDDVPMILVGNKCDLEDERVV
GKEQGQNLARQWNNCAFLESSAKSKINVNEIFYDLVRQINRKTFVPGKARKKSSCQLL

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FIGURE 1660

GCTCCTTCTAGGATCTCTGCCTGGTTGGCCCCGCTGCCTCCACTCCTGCCTCCACCATGTCCATTAGGGGACCC
AGAAGTCTCTACAAGGTGTCACCTCTGGCCCCGGGCTTCAGCAGCCACTCCTACACAAGTGGGCCCGGTGCC
ACATCAGCTCCTCAAGCTTCTCCCAAGTGGGCAGCAGCTGCTTTCGGGGTGGCCTGGCGCGCGCTGTGGTGGG
CCAGCGGCATGGGAGGCATCACCGCGGTACAGTCAACCAGAGCCTGCTGAGCCCTTGTCTTGGAGGTGGACC
CCGACATCCAGGCTGTGTGACCCAGGAGAAGGAGCAGATCAAGACCTCAACAACAAGTTTGCTCCTCTCATAG
ACAAGGTACGGTTCTTGGAGCAGCAGAACAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAAGCG
CCGGAGCAACATGGACAACATGTTCAAGAGCTACATCAACAACCTTAGCGCGCAGCTGGAGACTCTGGGCTAGG
AGAAACTGAAGCTGGAGCGGAGCTTGGCAACATGTAGGGGCTGGTGGAGGACTTCAAGAACAAAGTATGAGGATG
AGATCAATAAGCGTGACAGAGATGGAGAATGAATTTGCTCATCAAGAAGGATTGTGGATGAAGCTTACATTAA
AAGGTAGAGCTGGAGTCTCGCCTGGAAGGGCTGACTGATGAGATCAACTTCTCAGGCAGCTGTATGAAGAGGAG
ATCCGGGAGCTGCAGTCTTGGATCTCAGACACATCTGTGGTGCTGTCCATGGACAACAGCCGCTCCCTGGACATG
AACAGCGTCATCGCTGAGGTCAAGGCAAGTACGAGGAGATCGCCAACCGCAGCCAGGCCGAGGCTGAGAGCATG
TACCAGATCAAGGATGAGGAGCTGCAGAGTCTGGCTGGGAAGCATGGGGATAACCTGCGGTGCACAAAGACTAAG
ATCTCCGAGATGAACCGGAACATCAGCCGGCTCCAGGCTGAGAATGAGGGCTCAAAGGCCAGAGGGCTTTCCTG
GAGGCCCCATTGCAGATGCCAGCAGTGTGGAGAGCTGGCCAATTAAGGATGCTAACGCCAAGTTGTGAGCTGG
AGGCCGCTTGCAGCGGGCCAAAGCAGGACATGGCGTGGCAGCTGCGTGAGTACCAGGAGCTGTATGAACGTCAGGC
TGGCCCTGGACATCGAGATCGCCACCTACAAGAAGCTGCTGGAGGGCAGAGAGCCGGCTGGAGTCTGGGATGC
AGAACATGAGTATTCATACGAAGACCACCAGCGGCTATGCAAGTGGTCTGAGCTCGGCTGTGGGGGCTCACAA
GCCCGGGCTCAGTACGGCCTGGGCGCCAGCTCCTTCAGCCGACCAAGCTACTCCAGGGCCGTTGGTTGTGAAGA
TCGAGACACGTGATGGGAAGCTGGTGTCCGAGTCTCTGACGTCCTGCCCAAGTGAACAGCTGTGGCAGCCCTC
CCAGCTACCCCTCTGCGCTGCCCTGCCAGAGCCTGGGAGGGAGGTCACTATCAGGGTAGCACTGGGAACAGGAGA
CCCACCTGAGGCTCAGCCCTAGGCTCAGTCCACCCGCGGGGAGTTTACTGCTGGGGACCCCCCTTTGCCCA
TGCTCCAGCTACAAACAATTCAGTTGCTTTTTTTTTTTTTTTTGGTCCAAAATAAAACCTCAGCTAGCTCTGC

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FIGURE 1661

MRMRSISVQRWRMNLSSRRIVDEAYINKVELESRLGLEITDEINFLRQLYEEEIRELQSWISDTSVVLSMDNSRS
LDMNSVIAEVKAQYEEIANRSQAESAEMYQIKDEELQSLAGKHGDNLRCTKTKISEMNRNISRQAENEGKKGQR
AFLEAAIADAEQCGELAIKDANAKLSSWRPPCSGSPRTWRGSCVSTRS

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FIGURE 1662

AGTGGGCAGCAGCTGCTTTCGGGGTGGCCTGGGCGGCGGCTGTGGTGGGGCCAGCGGCATGGGAGGCATCACCGC
GGTCACAGTCAACCAGAGCCTGCTGAGCCCCCTTGTCTGGAGGTGGACCCCGACATCCAGGCTGTGTGCACCCA
GGAGAAGGAGCAGATCAAGACCCTCAACAACAAGTTTGCTCCTTCATAGACAAGGTACGGTTCCTGGAGCAGCA
GAACAAGATGCTGGAGACCAAGTGGAGCCTCCTGCAGCAGCAGAAGACGGCCGGGAGCAACATGGACAACATGTT
CAAGAGCTACATCAACAACCTTAGCGGGCAGCTGGAGACTCTGGGCTAGGAGAACTGAAGCTGGAGGCGGAGCT
TGGCAACATGTAGGGGCTGGTGGCTGGGATGCAGAACATGAGTATTATACGAAGACCACGCGGCTATGCAAG
TGGTCTGAGCTCGGCCTGTGGGGGCTCACAAAGCCCCGGCCTCAGCTACGGCCTGGGCGCCAGCTCCTTCAGCCG
CACCAGCTACTCCAGGGCCGTGTTGTGAAGATCGAGACACGTGATGGGAAGCTGGTGTCCGAGTCCTCTGACGT
CCTGCCCAAGTGAACAGCTG

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FIGURE 1663

CTGGGCGGCGGCTGTGGTGGGGCCAGCGGCATGGGAGGCATACCGCGGTCAAGTCAACCAGAGCCTGCTGAGC
CCCCTTGTCTTGAGGTGGACCCCGACATCCAGGCTGTGTGCACCCAGGAGAAAGGAGCAGATCAAGACCCCTCAAC
AACAAAGTTTGCCTCCTTCATAGACAAGGTACGGTTCTTGGAGCAGCAGAAAGATGCTGGAGACCAAGTGGAGC
CTCCTGCAGCAGCAGAAGACGGCCGGGAGCAACATGGACAACATGTTCAAGAGCTACATCAACACCTTAGGCGG
CAGCTGGAGACTCTGGGCTAGGAGAAACTGAAGCTGGAGGCGGAGCTTGCAACATGTAGGGGCTGGTGGAGGAC
TTCAGAACAAGTATGAGGATGAGATCAATAAGCGTGCAGAGATGGAGAATGAATTGTCTCATCAAGAAGGAT
TGTGGATGAAGCTTACATTAAACAAGGTAGAGCTGGAGTCTCGCTGGAAAGGCTGATGATGAGATCAACTTCCT
CAGGCAGCTGTATGAAGAGGAGATCCGGGAGCTGCAGTCCTGGATCTCAGACACATCATCGCTGAGGTCAAGGCA
CAGTACGAGGAGATCGCCAACCGCAGCCAGGCCGAGGCTGAGAGCATGTACCAGATCAAGGATGAGGAGCTGCAG
AGTCTGGCTGGGAAGCATGGGGAT

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FIGURE 1664

GCGGCCGCGGCCGTGAGCCTGCCCCAACTCGCCCTCAGCCGGCTGGCCGGCGGCCATGAGGTCTACATCCC
GTCCTTTCGCTATGAAGAGAGCGACCTGGAGCGGGGATACACGGTGTTTAAAGATAGAAAGTGTCAATGAATGGAAG
AAAACATTTTGTGAAAAAGATACAGCGAATTTTCATGCTTTGCACAAAAAGCTTAAAGAAATGTATAAAACTCC
AGAAATCCCTTCTAAACATGTTAGGAACCTGGGTCCCCAAAGTCTTGGAACAGCGACGACAGGCTTGGAAACATA
CTTACAGGCTGTCAATTTAGAAAAATGAAGAACTCCCAAACCTGTTCTTGATTCTCTAAATGTGCCACACTTGGC
CTCTCTACCAAAGGCAGAAAGTTGTGGATCTTTTGTAGAAACAGAGTCTGAAGAGTCAAGCAAACACTGTCCCACCA
GCCTGTGCTGCTGTTCTCAGGGATCCATATGTCTTGCTGCAGCCAGCGATTTTCCAAATGTGGTTATTGAAGG
AGTCCCTCATGGGATATTTTACCCTCATCTACAGCCAGGTAGAAATCCTACATGGCTAAAAGAAGCAGAAGCAA
GTTTCGAAGTCACAGTCAAGGAAATCAATACCTACCAATTTAACCTAAACGCTATGATATATAACAGCTCTAGCT
AGTGGTAAAGTGACAGTCCCAGCTTAATTCAGGGCAGGGACATTTCCATTAGAATGGTGCTCTTAAAAATAGAA
ACTGAACCGGGCGGTGGTCAGGCTAAGGCCAAGTGTTTAAAGAGTAGAGTGTAGCTGCCAGCGTAGAAACCCAT
GAAAAGGAGGCCACAGGAGATTCTGGGAGCACTGGGTGTAGCAAAACAAGCCACTCTCTGCTTCAGTCGCACC
ATTTGCTAATGAAAAATCATATCCTGAATCATACTGAGACTGATCAACTTTGGTAGCTTTTTTGTTCAGATCTTA
TGACACACTACTCTCTCACCGTGAGATTTTCTCAGCCAGTGATAGTACATTTCTGAAATGCTGGCACCAGGAGAC
GGCCACAGACACACACTGCTAAATGTGAAGATGGAACATAACTGGAAATTAATATACTGACAATATTATGGCA
TTTTTAAGATCATGGCATTTTAATTTACATTAGAGTGGAGTTGCATCATACTCAGGGGTTAGCTTCCAAGGTCAG
TACATAGGTAATAATGGGCTATTAGGATGATCCTTGAAAGCCCTTTAGAAGGGTGCCATGTTGGAACCTGTACAT
CACAAAGTAGCTTTTCTCCTATGTTGGAAAAAAGACTGTTTCTTTGTTGAAGACCAAGTGAAGTTGTTGG
TGTTTGTGTTAGGGGCCATTTGTTAAAAAAGCAGACATAAATTTTAACTAGAACTCAGCCGCAAGATGCT
TGCCCCGCTAGTGGCAGATGTGAACAGTGAACAGGAGTGAAGCGCCACCCAGCGGATGGACAGCACCCACCTGGGT
TTACTCAAGGGTGTGCATTTCATTTAGGTGGGATCGCCACAGGATTTTCATGTTATTTTCTTACGGCTTCTTTT
CACTGACCTCATTTGTTGAGTTAATGTAAGTTAAATGTGCTATGATATAACTCCACTGTACATCATCTTTGAG
TAGTAAAGGATAAAGCATATATACTACCTATATGTATGTGCTGTATGTGGGCATTTTCATTGAGATCTAATTAAT
AGCTAGCCTATTTATGGTTATTGTTTTAGTAAGTCTGTGGGAGCAAGGATTTTAAATCAAACCTAATAACTA
CATCATGGTTTTTGATTAGGATCTAAATATTACAGGTTTTAAGCCTGCTGCAAACTTTTAAATATTATGATAGAT
TCTGTACTACATGTGGGAACAAGCAAGAACTAAATAATCAAATGTTGCAACCAAAAGTAATAGTTGGGATTG
GAGATTTTTTAAATGTTTTTATGTTATTAGCTATTGAGGTTAAATAAAACAGAACAGGAAAAA
AAAAA

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FIGURE 1665

MEVYIPSFRIEESDLERGYTVFKIEVLMNGRKHFEVKRYSEFHALHKKLKKCIKTPEIPSKHVRNWVPKVLQRR
QGLETYLQAVILENEELPKLFLDFLNVRHLP SLPKAESCGSFDETESEESSKL SHQPVL LFLRDPYVLP AASDFP
NVVIEGVLHGIFYPHLQPR

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FIGURE 1666

AGCTCGCGCAGTCGTTGCGGTGAGCGAAGATGCGCGCCGAGAGGGAACCTCTCCGCTGGGGGACGGGAAGCCCCA
CCGACTTTGAGGATCTGGAGGACGAGAGGACCTGTTCCACGAGCACTGTCTCCACCTTAGAGTCAAGTCCATCAT
CTCCAGAACCCAGCTAGTCTTCTCGCAGAAGATATTAGTGCAAACCTCCAATGGCCCAAACCCACAGAAGTTGTAT
TAGATGATGACAGAGAAGATCTTTTTGCAGAGCCACAGAAGAAGTTTCTTTGACAGCCCTGAAAGGGGAACCTA
TCCTATCTCTCGGAACCTTCTCCTGCAGTCACACCTGTCACTCTACTACACTATTGCTCCTAGAATTGAATCAA
AGAGTATGTCTGCTCCCGTGATCTTTGATAGATCCAGGGAAGAGATTGAAGAAAGACAAATGGAGACATTTTGT
ACATAGAAATTGGTGATCAGATCCAGAAAAAGTTGGTGATGGCATGAATGCCATATATGGCATATAGAGTAACAA
CAAAGACATCTCTTTCCATGTTTCAGTAAGAGTGAAATTTTCAGTGAAGAAGATTACGCGACTTTCCTGGTTTGC
ACAGCAAATTAGCAAGCAAAATATTTACATGTTGGTTATATTGTGCCACCAGCTCCAGAAAAGAGTATAGTAGGGA
TGACCAAGGTCAAAGTGGGTAAAGAAGACTCATCATCCACTGAGTTTGTAGAAAAACGGAGAGCAGCTCTTGAAA
GGTATCTTCAAAGAACAGTAAACATCCAACCTTACTACAGGATCCTGATTTAAGGCAGTTCTTGAAAAGTTTCAG
AGCTGCCTAGAGCAGTTAATACACAGGCTCTGAGTGGAGCAGGAATATTGAGGATGGTGAACAAGGCTGCCGACG
CTGTCAACAAAATGACAAATCAAGATGAATGAATCGGATGCATGGTTTGAAGAAAAGCAGCAGCAATTTGAGAATC
TGGATCAGCAACTTAGGAAACTTCATGTGCTGTTGAAGCCTTGGTCTGTATAGAAAAGAACTTTTCAGCCAAACA
CAGCTGCCTTTGCTAAAAGTGCTGCCATGTTAGGTAATTTCTGAGGATCATACTGCTTTATCTAGAGCTTTGTCTC
AGCTTGACAGAGTTGAGGAGAAGATAGACCAGTTACATCAAGAACAAGCTTTTGTCTACTTTTATATGTTTTTCAG
AATCTACTTAGTGACTACATTCGTCTTATTGTCTGAGTGAAAGGTGTGTTTGACCATCGAATGAAGTGCTGGCAGA
AATGGGAAGATGCTCAAATTAATCTTTGCTCAAAAAACGCTGAAGCTGAAGCAAAAATGATGGTTGCTAACAAACCAG
ATAAAATACAGCAAGCTAAAAATGAATAAGAGAGTGGGAGGCCGAAAGTGCAACAAGGGGGAAGAGATTTTGAAC
AGATATCTAAAACGATTGCAAAAGAAGTGGGAAGATTTGAGAAAGAACGAGTGAAGGATTTTAAACCGTTATCA
TCRAAGTACTTAGAATCACTAGTTCAAACACAACAACAGCTGATAAAATACTGGGAAGCATTCCTACCTGAAGCCA
AAGCCATTGGCTAGCAATAAGATTGTTGCCGTTAAGAAGACCTTGGATGTTGTTCCAGTTATGCTGGATTCCACA
GTGAAATCATTTAAACCATTCTAAATAAACCACTATATATTTTATGAATTACATGTGGTTTTATATACACACACA
CACACACACACACACACACACACTCTGACATTTTATTACAAGCTGCATGCTCTGACCTCTTTGAATTAAG
TGGACTGTGGCATGACATTCTGCAATACTTTGCTGAATTGAACACTATTGTGTCTTAAATACTTGCCTAAATAG
TGCATGCAAGACCAAGAAAAATTTTACAATATTTTTCTTTACAATATGTTCTGTAGTATGTTTACCTCTTTATG
AAGTGAATTACCAATGCTTTGAATAATGTTCACTTATACATTCCTGTACAGAAATTACGATTTTGTGATTACAGT
AATAAAATGATATTCTTTGTG

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FIGURE 1667

MAAEREPPPLGDGKPTDFEDLEDGEDLFTSTVSTLESSPSSPEPASLPAEDISANSNGPKPTEVVLDDDDREDLFA
EATEEVSLDSPEREPILSSEPSPAVTPVPTTTLIAPRIESKMSAPVIFDRSREEIEEEEANGDIFDIEIGVSDPE
KVGDMNAYMAYRVTTKTSLSMFSKSEFSVKRRFSDFLGLHSLASKYLHVGYIVPPAPEKSI VGMTKKVKGED
SSSTEFVEKRRAALERYLQRTVKHPTLLQDPDLRQFLESSELPRAVNTQALSGAGILRMVNKAADAVNKMTIKMN
ESDAWFEEKQQQFENLDQQLRKLHVSVEALVCHRKELSAATAFAKSAAMLGNSDHTALSRALSQLAEEVEEKID
QLHQEQAFADFYMFSELLSDYIRLIAAVKGVFDHRMKCWQKWEDAQITLLKKREAEAKMMVANKPKDIQQAQKNEI
REWEAKVQQGERDFEQISKTI RKEVGRFEKERVKDFKTVIIKYLESLVQTQQQLIKYWEAFLPEAKAIA

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FIGURE 1668

AGCTCTCTGGACCTTGGAGCAGGCCTGCCGCCTTCATGTCCACTCTCCTCATCAATCAGCCCCAGTATGCGTGCC
TGAAAGAGCTGGGGCTCCGCAGGAAAAACGAGGGCTGTATAATGGAAGCTGGGGAGGCCGGGGAGAGGTTATTA
CGACCTATTGCCCTGCTAACACGAGCCAATAGCRAAGTCCGACAGGCCAGTGTGGCAGACTATGAAGAACTG
TAAAGAAAGCAAGAGAAGCATGGAAAACTGGGCAGATATTCCTGCTCCAAACAGGAGAAATAGTAAGACAGA
TTGGCGATGCCTTGGGGAGAAAGATCCAAGTACTAGGAAGCTTGGTGCTTTGGAGATGGGGAAAACTCTTAGTGG
AAGGTGTGGGTGAAGTTCAGGAGTATGTGGATATCTGTGACTATGCTGTTGGTTTCAAGGATGATTGGAGGAC
CTATCTTGCCTTCTGAAAGATCTGGCCATGCATGATTGAGCAGTGGAAATCCCGTAGGCCCTGGTTGGAAATCATCA
CGGCATTCAATTTCCCTGTGGCAGTGTATGGTTGGAACAACGCCATCGCCATGATCTGTGGAATGTCTGCCTCT
GGAAAGGAGCTCCAACCACTTCCCCTCATTAGTGTGGCTGTCAAAAGATAATAGCCAAGGTTCTGGAGGACAACA
AGCTGCCTGGTGCATTTGTTCCTTGACTTGTGGTGGAGCAGATATTGGCACAGCAATGGCCAAAGATGAACGAG
TGAACCTGCTGTCCTTCACTGGGAGCACTCAGGTGGGAAAAACAGGTGGGCCTGATGGTGCAGGAGAGGTTTGGGA
GAAGTCTGTTGGAACITGGAGGAAACAATGCCATTATTGCCCTTTGAAGATGCAGACCTCAGCTTAGTGTTCAT
CAGCTCTCTTCGCTGCTGTGGGAACAGCTGGCCAGAGGTGTACCCTGCGAGGCCAGCTGTTTATACATGAAAGCA
TCCATGATGAGTTGTAAACAGACTTAAAAAGGCCTATGCACAGATCCGAGTTGGGAACCCATGGGACCTTAATG
TTCTCTATGGGCCACTCCACACCAAGCAGGCACTGAGCATGTTTCTTGGAGCAGTGGAGAAGCAAGAAAGAAAG
GTGGCAGATGGTCTATGGGGGCAAGGTTATGGATCGCCCTGGAAATTAATGAGAACCAGACAATTGTGACAGGTC
TTGGCCACGATCGTCCATTGCACACACAGAGACTTTTGCTCCGATTCTCTATGTCTTAAATTCAGAAATGAAG
AAGAGGTCTTTGCATGGAATAATGAAGTAAACAGGCACTTTCAGTAGCATCTTTACCAAGATCTGGGCAGAA
TCTTTTCGCTGGCTTGGACCTAAGGATCAGACTGTGGCATTGTAATGTCAACATTCCAACAAGTGGGGCTGAGA
TTGGAGGTGCCTTTGGAGGAGAAAAACACACTGGTGGTGGCAGGAGTCTGGCAGTAGTGCCTGGAAACAGTACA
TGAGAAGGTCTACTTGTACTATCACTACAGTAAAGACCTTCCTCTGGCCCAAGGAATCAAGTTTCAGTAAAGGT
GTTTTAGATGAACATCCCTTAATTTGAGGTGTTCCAGCAGCTGTTTTTGGAGAAGACAAAGAAATTAAGTTTT
CCCTGAATAAATGCATTATTATGACTGTGACAGTGACTAATCCCCCTATGACCCCAAGCCCTGATTAAATCAAG
AGATTCTCTTTTAAAAATCAAAAATAAAATTGTTACAACATAGCCATAGTTACT

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FIGURE 1669

ACTGGCTGCTCTGAAAAGCCATCTTTGCATTGTTCCCTCGTCCGCCTCCTTGCTCGCGGCACCGCCTCCGCCACGC
GCCTCCTCCGCCGCCGCGGACTCCGGCAGCTTTATCGCCAGAGTCCCTGAACTCTCGCTTTCTTTTTAATCGCCT
GCATCGGATCACCGCGTGCCCCACCATGTGACAGCGAGCCGTAGACACCAGCTCCGAAATCACCAAGGACT
TACAGGAGAAGAAGGAAGTTTGGAAGAGGCAGAAAATGGAAGAGACGCCCTGCTAACGGGAATGCTAATGAGG
AAAAATGGGGAGCAGGAGGCTGACAATGAGGTAGATGAAGAAGAGGAAGAAGGTGGGGAGGAAGAGGAGCAGGAAG
AAGGTGATGGTGAGGAAGAGGATGGAGATGAAGATGAGGAAGCTGAGACAGCTACGGGCAAGCGGGCAGCTGAAG
ATGATGAGGATGACACGCGCTCTCCACCACCAACCCAAACCATGAGAATTGCAACAGGGGAGGAAAAAAGAAC
CAAAACTTCCAAGGCCCTGCTTTTTTCTTAAAGTACTTTAAAAAGGAATTTGTTTGTATTTT

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FIGURE 1670

GGGGGAACATTGGCGGCTCGGGAGCGCGCGCTCTTGCCTCCCCAACAGCGGCGCCGGGGCGCGGGGCGCCGT
CGGGCAGCTCCCGGTGCTCTTCTGTTCTCAGTCTTCGCGCGACCTCGTCGGTGCCACACGGGGCGGGCTACG
AGCTGCTCATCCAGAAGTTCTCAGCCTGTACGGCGACGATCGACATGACCCGCAATTCTGGTGCAGCTGT
TCGCCGAGGAGTGGGGCCAGTACGTGGACTTGCCCAAGGGCTTCGCGTGAGCGAGCGCTGCAAGGTGCGCCTCG
TGCCGTTGCAGATCCAGCTCACTACCTTGGGAAATCTTACACCTTCAAGCACTGTGTTTTCTGCTGTGATGCG
AGGAAAGGTTGAGACAGCCATCAAGTATTTGGGGATATTATTAGCGTGGGACAGAGATTGTTGCAAGGGGCC
GGATTTTAGGAATTCCTGTTATTGTAAACAGAACATACCCTAAAGGCTCTTGGGAGCAGGTTCAAGAAATGATT
TAACAGGTGAAAACTGGTACTTCCAAAGACCAAGTTTTCAATGGTATTACCAGAAGTAGAAGCGGCATTAGCAG
AGATTCGCCGAGTCAGGAGTGTGTATTATTGGAGTAGAACTCATGTGTGCATCCAAACAACTGCCCTGGAGC
TAGTTGGCCGAGGAGTCGAGGTTCACTATTGTTGCTGATGCCACCTCATCAAGAAGCATGATGGACAGGATGTTTG
CCCTCGAGCGTCTCGCTCGAACCGGGATCATAGTGACCACGAGTGAGGCTGTTCTGCTTCAGCTGGTAGCTGATA
AGGACCATCCAAATTCAGGAAATTCAGAACTAATTAAGGCGAGTGCTCCAGAGTCGGGTCTGCTTCCAAAG
TATAGGACATTTGAAGAACTGGTATGCTACTCTGTTGAAGGACAGTCAGGTGAAGGACTGAAGCCACACAA
GCTCTTCTTATCTCTACTAGAATTAATGTTAAGTCAAAACCGGCTCCTTTTTTTCGCCCTCCTAGTGAACCTTA
ACGAGCTAGACCATTTGAGTACCAGCATTTAGTTACAAAGCTCAAAGGCTTCCGGTGCTGCTTACCTTCTTTTT
TGTTAATGTGCTTTTATTATTAAAAAAATTAATGAAGATGCCTGTTTGTCTCTACTGTGACTCTGATCG
TATCTTCCAAAGTGAGACTCTTGTGAAGTTTTCTTAAATTGTTACITTTAAAGAAATGACGTACCAACATG
ATTTGGCTTTTATATTACTGTGAAGATGTTATAATGTTAATGTGGATGTAGTGCTTTACTTTACAGATTGATTGG
AATAAGATTATTGCATATGAATTTACCCACAGGACTCTGAATCATGTTACCCACTCCCTCACAATGTTGCCAC
TTAGTGAGTTGCATTGATCTATCCGTACCAATGATGTTGAATAATTACATATCTTCTTGACTATACTGATTTT
TTATTTTGGTCACTATTACTAAATCTCTGTTAATATTCTCTTTTAACTGAAAGGGATGGGATAGAAGGGTTT
GCAATGCCATATTATTGGTGGAGGCTGTTTTAACATCTTTGAAGTATGGCTTGCTGAATATCTTTACCAACATC
TTGAATATATATTCTAGTGCCACAAGATTTAGCAAAAGATAAAGCTTGGGTGGAATATCATTTTAAAAATGTC
ATGTTCTGTTCTATATTTTCTTCACTACTCTCCAAATATTGTAATGCAAAAAGTCTCAGTAATGATTGTGGTAGT
ATTAATTTTGTGGTCATTGTTTCTCTTCGATAAATTTATTTTCAATAAATCTGTTAGAGGGTTTGAAGTGT
TTTCAAATATGTGAATGTGAACTGCTGCTCTTTATATTAAAGTAATTAAGAAAA

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FIGURE 1671

GCTTGCCCGTCGGTCGCTAGTCGCTCGGTGCGCGTCGTCGCCGCTCCATGCGCGCTCTTCGTGCGGCTGCTGGCTC
TCGCCCTGGCTCTGGCCCTGGGCCCGCCGCGACCCCTGGCGGGTCCCGCCAAGTCGCGCTTACCAGCTGGTGCTGC
AGCACAGCAGGCTCCGGGCGCCGACAGCGCCCAACGTGTGTGCTGTGTCAGAAAGTTATTGGCACTAATAGGA
AGTACTTACCAACTGCAAGCAGTGGTACCAAAAGAAAATCTGTGGCAAAATCAACAGTCATCAGCTACGAGTGCT
GTCTCGGATATGAAAAAGTCCCTGGGAGAGAGGGCTGTCCAGCAGCCCTACCACTCTCAAACTTTACGAGACCC
TGGGAGTCGTGGATCCACCCCACTCAGCTGTGTACACGGACCGCACGGAGAAGCTGAGGCCCTGAGATGGAGGGGC
CCGGCAGCTTACCATCTTCGCCCTTAGCAACGAGGCCCTGGGCCCTCTTGCCAGCTGAAAGTCTGGAGCTCCCTGG
TCAGCAATGTCAACATTGAGCTGCTCAATGCCCTCCGCTACCATAATGGTGGCAGGCCAGTCTCTGACTGATGAGC
TGAACACCGCATGACCCCTCACCTCTATGTACCAAGAAATCCAACATCCAGATCCCACTACTCTAATGGGATTG
TAACGTGTAAGCTGTGCCCGGCTCTGAAAGCCGACCACTGCAACCAACCGGGTGGTGACCTCATCGATAAGG
TCATCTCCACCATCACCAACAACATCCAGCAGATCATTGAGATCGAGGACACCTTTGAGACCCCTTCGGGCTGCTG
TGGCTGCATCAGGGCTCAACACGATGCTTGAAGGTAACGGCCAGTACACGCTTTTGGCCCCGACCAATGAGGCCCT
TCGAGAAGATCCCTAGTGAGACTTTGAACCGTATCTTGGGCGACCCAGAAGCCCTGAGAGACCTGCTGAACAAC
ACATCTTGAAGTCAGCTATGTGTGCTGAAGCCATCGTTGCGGGGCTGTCTGTAGAGACCCCTGGAGGGCAGCAGAC
TGGAGGTGGGCTGCAGCGGGGACATGCTCACTATCAACGGGAAGCGCATCATCTCCAATAAAGACATCCTAGCCA
CCAACGGGGTGATCCACTACATTGATGAGCTACTCATCCGAGACTCAGCCAAGACACTATTGAAATGGCTGCAG
AGTCTGATGTGTCCACAGCCATTGACCTTTTCAGACAAGCCGGCTCGGCAATCATCTCTCTGGAAGTGAGCGGT
TGACCCCTCTGGCTCCCTGAAATCTGTATTCAAAGATGGAACCCCTCCAATTGATGCCATAACAAGAAATTTGC
TTCGGAACCCACATAAATTAAGACCCAGCTGGCCCTCTAAGTATCTGTACCATGGACAGACCCTGGAAACTCTGGCG
GCAAAAAAGTGAAGTTTTTGTATTGTAATAGCTCTGTGATTGAGAACAGCTGCATCGCGGCCACGACAAGA
GGGGGAGGTACGGGACCCTGTTACGATGGACCGGGTGTGACCCCCAATGGGGAGTGTCTATGGATGCTCTGA
AGGGAGACAATCGCTTTAGCATGCTGGTAGCTGCCATCCAGTCTGACGAGTACGCGAGACCCCTCAACCGGGAAG
GAGTCTACACAGTCTTTGCTCCCAAAATGAAGCCCTTCGAGGCCCTGCCACCAAGAGAAGCGGAGCAGACTCTTG
GAGATGCCAAGGAACCTTGCCAACTCTGAAATACCACATTTGGTGATGAATCCGTTAGCGGAGGCATCGGGG
CCCTGGTGGGCTAAAGTCTCTCCAAGGTGACAAAGCTGGAAGTCAGCTTGAAAAACAATGTGGTGAGTGTCAAC
AGGAGCCCTGTTGCCGAGCCTGACATCATGGCCCAAAATGGCGTGGTCCATGTATCAACCAATGTTCTGCAGCCTC
CAGCCAAACAGACCTCAGGAAGAGGGGATGAATTCGACAGCTCTGCGCTTGAGATCTTCAAAACAGCATCAGCGT
TTTCAGGGCTTCCAGAGGCTGTGCGCAGTACGCCCTGTCTATCAAAGTTATTAGAGAGGATGAAGCATTAGC
TTGAAGCACTACAGGAGGAATGCACACGGCAGCTCTCCGCCAATTTCTCTCAGATTCTCAGAGACTGTTTGA
ATGTTTTCAAAACAAGTATCACACTTTAATGTACATGGGCCGACCAATAATGAGATGTGAGCCCTTGTGATGTG
GGGGAGGAGGAGAGAGATGTACTTTTTAAATCATGTTCCCTTAAACATGGCTGTAAOCCACTGCATCAGAA
ACTTGGATGTCACTGCTGCATTACCTCTCCAGAGAGGACCTATCCCAATGTGGAATTGACTGCCTATGCCAAG
TCCTTGGAAAAGGAGCTTCAGTATTGTGGGGCTCATAAAACATGAATCAAGCAATCCAGCCTCATGGGAAGTCT
GGCAGAGTTTTGTAAAGCCCTTGCACAGCTGGAGAAATGGCATCATTATAAGCTATGAGTTGAAATGTTCTGT
AAATGTGTCTCACATCTACAGTGGCTTGGAGGCTTTTATGGGGCCCTGTCCAGGTAGAAAAGAAATGGTATGA
GAGCTTAGATTTCCCTATTGTGACAGAGCCATGGTGTGTTTGTAAATAATAAAACCAAGAACATA

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FIGURE 1672

MALFVRLLALALALALGPAATLAGPAKSPYQLVLQHSRLRGRQHGPNCVAVQKVI GTNRKYFTNCKQWYQRKICG
KSTVISYECCPGYEKVPGEKGCPAALPLSNLYETLGVVGSTTTQLYTDREKLRPEMEGPGSFTIFAPSNEAWAS
LPAEVLDSLVSNNVNIELNLALRYHMGRRVLTDELKHGMLTSMYQNSNIQIHHPYNGIVTVNCARLLKADHHT
NGVVHLIDKVI STITNNIQQI IEIEDTFETLRAAVAASGLNTMLEGNGQYTL LAPTNEAFEKIPSETLNRILGDP
EALRDLNNHILKSAMCAEAI VAGLSVETLEGTTELVGCSGDM LTINGKAIISNKDILATNGVIHY IDELLIPDS
AKTLFELAAESDVSTAIDLFRQAGLGNHLSGSERLTL LAPLNSVFKDGT PPIDAHTRNLLRNHII KQQLASKYLY
HGQILETLGGKKLRVVFYRNSLCIENSCIAAHDKRGYGT LFTMDRVLT PPMGTVM DVLKGDNRF SMLVAAIQSA
GLTETLNRREGVYTVFAPTNEAFRALPPRERSRL LGDAKELANILKYHIGDEILVSGGIGALVRLKSLQGDKLEVS
LKNNVVS VNKEPVAEPDIMATNGVVHVITNVLP PPANRPQERGEDELADSALEIFKQASAFSRASQRSVRLAPVYQ
KLLERMKH

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FIGURE 1673

TCAGAGTCCGGCTCAGGCTCCGGCTGCGGCTCCAGCCCGCGAATGCCCATTCGCTGACCCCTGCGCGGGCCTTCGC
CCTGGGGCTTCCGCTTGGTGGGCGGCCGGGACTTCAGCGCGCCCCCACCATTCTACGGGTTCATGCTGGCAGCA
AGGCTGCATTGGCTGCCCTGTGCCAGGAGACCTGATCCAGGCCATCAATGGTGAGAGCACAGAGCTCATGACAC
ACCTGAGGCGACAGAACCGCATCAAGGGCTGCCACGATCACCTCACACTGTCTGTGAGCAGGCCTGAGGGCAGGA
GCTGGCCCACTGCGCCCTGATGACAGCAAGGCTCAGGCACACAGGATCCACATCGATCTGAGATCCAGGACGGCA
GCCCAACAACCAAGCAGGCGGCCCTCAGGCACCGGGACTGGGCCAGAAGATGGCAGACCAAGCCTGGGATCTCCAT
ATGGACAACCCCTCGCTTTCAGTCCCTACAATGGCAGCAGCGAGGCCACCTCGCCAGCCAGATGAGCACCC
TGCAATGTCTCCACCCCCAGCGCTGACCCAGCCAGAGGCTTCCGCGGAGCCGGGACTGCAGATCCGACCTGG
GCTCCGAGGTGTACAGGATGTCTGCGGGAGCCAGCCGAGCCCGTGGCCGCGGAGCCCAAGCAGTCAAGCTCCTTCC
GCTACTTGCAGGGCATGCTAGAGGCCGCGGAGGGCGGGGATTGGCCCGGGCTGGCGGGCCCCGGAACTCAAGC
CCACGGCCAGCAAGCTGGGCGCTCCGCTGAGCGGCTGCGAGGGCTGCCCGAGTGCACGCGCTGCGGCCACGGCA
TCGTGGGCACCATCTCAAGGCACGGGACAAGCTCTACCATCCCGAGTGTCTTATGTGCAGTGACTGCGGCTGA
ACCTCAAGCAGCGTGGTTACTTCTTCTGGACGAGCGGCTCTACTGTGAGAGCCAGCCCAAGGCGCGCTGAAGC
CGCCCGAGGGCTACGACGTGGTGGCGGTGTACCCCAATGCCAAGGTGGAACCTCGCTGAGACTGGGACCTGCTCC
CACGCTCTCTTCTTAAGGTCCCTGCTCGGCCGTTGAAATATGTTTACACCTGTCCCTCTAATAAAGCTCCCTGT
CTCCACCTTGAACTGTACCTGGCTGCCACCTTCCTGCGCAGGCATGCAATGGTCCCGAGTACAGTAGTATC
TGCTTAGGTGCCAGGCATGTCTAGGCTCTGGGTGCACTAGTGTGAGCAGGACGGGTACCATGCTGCCCTGAAGGGG
CCACAGCCTGGGTGGAAGGCAGACTGAATCAACAACGGGCCAGCTCTAGTAATACGAAGGTGAGGTCTGGGATGC
TGCGTGGCGCGCAGCAGAGGAGGTATGACCTGGGTGGGTGAGGGAAGTCTTAGTGTAGAACTAAGAGATGAG
GGAGGCACAACTCTGACGCGGGAACGTGTGTGCAAAAGGTGAGCTGGGGGCGAGAAAGGCCTCTGTGCGCCGT
ATCGGCACATAGCGGTTGGGGGTGGTGGGGTGTGGCAGCCTCAGGAGCATCGCTCCCTGGAGAGGGTGA
TTGAGTGTGGAGATCACCGGGGCCCGCGGGCCGTCTGCACCTCTGTTCCAGGTTTTCTGGCATTTCTGTTC
CAGGTTTTCTCCACCCACGAGCATTATTTCTCTCCGAGACCCCCCTTTCTTCCCCCTCTCTCTCCACAGG
GGGCGCGCTTAAATTTCCAGACAGAGACCAGAAGGAAGTTTAGAAAAGAAAGAACACTTGCCAGGGCAGCTTT
GCCCTCAAAGAGGCTCCCTCTGCTCTAAGTCAATTCACCCCTCTCTGAAAGTCCCGGCTTCCACCCCTCTCCT
CAGAGTCCCGCGTTTACCTCGTGGTGTGTTTGCTTGGGCTTTCATGCCCCGGCTGCACACATCGCTGTGTA
TTGTGGCTGTTCACTCCGAGGATGTGCTTAGACTCCGGTGGCGTGGATCTACCTCTAGTTTACTGTGCTGG
GAGAGAAACTGACTCGTTTTATTAGTGCCATTTAGCGAGCCAGAGTAACGTACATTTGTGCTGTTTTCAAT
TTTGTGCTATCGCAATCACAAAAAACTGTTATCAATTCACATTCATCAGCAGCAGACCCATTTCTTGTG
CTCCTGCCAGCTCAGGATATTATGTTTCTTTTTTCAATTTTGCCAGTCTGTAAAGTAAATGTATATGCGTTG
TTTTAA

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FIGURE 1674

MPHSVTLRGPSPWGFRVLVGGGRDFSAPLTIISRVHAGSKAALAALCPGDLIQAINGESTELMTHLEAQNRIKGCHDH
LTLVSVRPEGRSWPSAPDDSKAQAHRIHIDPEIQDGSPTTSRRPSGTGTGPEDEGRPSLGSPYQPPFFVPHNGS
SEATLPAQMSTLHVSPPSADPARGLPRSRDCRVDLGSEVYRMLREPAEPVAAEPKQSGSFYRLQGML EAGEGGD
WPGPGGPRNLKPTASKLGAPLSGLQGLPECTRCGHGIVGTIVKARDKLYHPECFMCSDCGLNLKQRGYFFLDERL
YCESHAKARVKPEEGYDVVAVYPNAKVELV

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FIGURE 1675

CGAGCCCCGCCGAACCGAGGCCACCCGGAGCCGTGCCAGTCCAGCCGGCCGTGCCGGCGGCCCTTAAGAACCC
CGGCAACCTCTGCCTTCTTCCCTCTTCCACTCGGAGTCGCGCTCCGCGCGCCCTCACTGCAGCCCCCTGCGTCGCC
GGGACCCCTCGCGCGGACCCGCCGAATCGCTCCTGCAGCAGAGCCAACTGCCCATCACTCGGATCGCGATGAGAC
CCTGGCTAGAGATGCAGATTAATTCCAACAAATCCCGGGGCTCATCTGGATTAATAAGAGGAGATGATCTTCC
AGATCCCATGGAAGCATGCTGCCAAGCATGGCTGGGACATCAACAAGGATGCCTGTTTGTCCGGAGCTGGGCCA
TTCAACAGGCCGATACAAAGCAGGGGAAAAGGAGCCAGATCCCAAGACGTGGAAGGCCAACTTTCGCTGTGCCA
TGAACCTCCCTGCCAGATATCGAGGAGGTGAAAGACCAGAGCAGGAACAAGGGCAGCTCAGCTGTGCGAGTGTACC
GGATGCTTCCACCTCTCACCAGAACCAGAGAAAAGAAAGTGAAGTCCAGCCGAGATGCTAAGAGCAAGG
CCAAGAGGAAGTCATGTGGGGATTCCAGCCCTGATACCTTCTCTGATGGACTCAGCAGCTCCACTCTGCCTGATG
ACCAACAGCAGCTACACAGTTCCAGGCTACATGCAGGACTTGGAGGTGGAGCAGGCCCTGACTCCAGCAGCTGTGCG
CATGTGCTGTACGAGCACTCTCCCGACTGGCACATCCCAAGTGGAAAGTTGTGCGGACAGCACCACTGATCTGT
ACAACTTCCAGGTGTCAACCATGCCCTCCACTCTGAAGCTACACAGATGAGGATGAGGAAGGGAAATTACCTG
AGGACATCATGAAGCTCTTGGAGCAGTCGGAGTGGCAGCCAACAAACGTGATGGGAAGGGGTACCTACTCAATG
AACCTGGAGTCCAGCCACCTCTGTCTATGGAGACTTTAGCTGTAAGGAGGAGCCAGAAATTGACAGCCACAGGGG
GGGATATTGGGCTGAGTCTACAGCGTGTCTTACAGATCTGAAGAACATGGATGCCACCTGGCTGGACAGCCCTGC
TGACCCCACTCGGGTTGCCCTCCATCCAGGCCATTCCCTGTGCACCGTAGCAGGGCCCTGGGCCCTCTTATTTC
CTCTAGGCAAGCAGGACCTGGCATCATGGTGGATATGGTGCAGAGAAGCTGGACTTCTGTGGGCCCTTCAACAGC
CAAGTGTGACCCCACTGCCAAGTGGGGATGGGGCTCCCTCCTTGGGTATTGACCTCTCAGGGCTTGGCAGGCC
AGTGTCTGGGTTTTTTCTGTGGTGTAAGCTGGCCCTGCCCTGGGAAGATGAGGTTCTGAGACCAGTGTATCA
GGTCAGGCACTTGGACAGGAGTCAGTGTCTGGCTTTTCTCTGAGCCAGCTGCCTGGAGAGGGTCTCGCTGTC
ACTGCTGGCTCTAGGGGAACAGACCACTGACCCAGAAAAGCATAACACCAATCCCAAGGCTGGCTCTGCAC
AAGAGAAAATTGCACTAAATGAATCTCGTCCCAAGAACTACCCCTTTTCAGCTGAGCCCTGGGAGCTTTC
AAAGCCAGTGAAATGTGAAGAAAGTGGGGTCCCTCGGGCGCATGCTCCCTCAGCCTCAGAGGAGCTTACCCTG
CTCCCTGCTTTGGCTGAGGGGCTTGGGAAAAAACTTGGCACTTTTTCGTGTGGATCTTGCCACATTTCTGATCA
GAGGCTGTACATAACATTTCCCCGAGCTCTTGGCTTTGCAATTATTATACAGTGCCTTGTCTGGGCGCCACC
ACCCCTCAAGCCCCAGCAGCCCTCAACAGGCCAGGGAGGGAAGTGTGAGCGCTTGGTATGACTTAAATTTGG
AAATGTCACTTAACCATTAAGTCATGTGTGAACACATAAGGACGTGTGTAATATGTACATTTGTCTTTTATAA
AAAGTAAATTGTT

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FIGURE 1676

MPITRMRMPWLEMQINSNQIPGLIWINKEEMIFQIPWKHAAKHGWDINKDACLFERSWAIHTGRYKAGEKEPDPK
TWKANFRCAMNSLPDIEEVKDQSRNKGSSAVRVYRMLPPLTKNQRKERKSSRDAKSKARKSCGDSPPDTFSD
GLSSSTLPDDHSSYTVPGYMQDLEVEQALTPALSPCAVSSSTLPDWHIPVEVVPDSTSDLYNFQVSPMFSTSEATT
DEDEEGKLPEDIMKLEQSEWQPTNVDGKGYLLNEPGVQPTSVYGDFSCKEPEIDSPGGDIGLSLQRVFTDLKN
MDATWLDLSLTFVRLPSIQAI PCAP

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FIGURE 1677

GCCGCTCGCTCGGCTCCGCTCCCTGGCTCGGCTCCCTGCCTCCGCTGCGCAGCCCCCGCGGTAGCCGCTCCGAG
CCCCGCCACATCCTCTGAGAAGATCGCTGTGCCACCCACGTATGCCGATCTTGGCAAACTGCCAGGGATGTC
TTCACCAAGGGCTATGGATTGGCTTAATAAAGCTTGATTTGAAAACAAAATCTGAGAATGGATTGGAATTTACA
AGCTCAGGCTCAGCCAACACTGAGACCACCAAGTGACGGGCAGTCTGGAAACCAAGTACAGATGGACTGAGTAC
GGCTGACGTTTACAGAGAAATGGAATACCGACAATACACTAGGCACCGAGATTACTGTGGAAGATCAGCTTGCA
CGTGGACTGAAGCTGACCTTCGATTATCCTTCTCACCTAACACTGGGAAAAAAAATGCTAAAATCAAGACAGGG
TACAAGCGGGAGCACATTAACCTGGGCTGCGACATGGATTTTCGACATTGCTGGGCCTTCCATCCGGGGTGCTCTG
GTGCTAGGTTACGAGGGCTGGCTGGCCGGCTACCAGATGAATTTTGAGACTGCAAAATCCCGAGTGACCCAGAGC
AAGTTTGAGTTGGCTACAAGACTGATGAATTCAGCTTCACACTAATGTGAATGACGGGACAGAGTTTGGCGGC
TCCATTTACCAGAAAGTGAACAAGAAGTTGGAGACCGCTGTCAATCTTGCTGGACAGCAGGAACAGTAACAG
CGCTTCGGAATAGCAGCCAAGTATCAGATTGACCTGACGCGCTGCTTCTCGGCTAAAAGTGAACAACTCCAGCCTG
ATAGGTTTAGGATACACTCAGACTCTAAAGCCAGGTATTAAGCTGACACTGTGAGCTCTTCTGGATGGCAAGAAC
GTCAATGCTGGTGGCCACAAGCTTGGTCTAGGACTGGAAATTTCAAGCATAAATGAATACTGTACAATTTGTTAAT
TTTAAACTATTTTGAGCATAGCTACCTTCAGAAATTTAGTGTATCTTTAATGTTGTATGCTCTGGGATGCAAGTA
TTGCTAAATATGTTAGCCCTCCAGGTTAAAGTTGATTGAGCTTTAAGATGTTTACCCTTCAGAGGTACAGAAGAA
ACCTATTTCCAAAAAAGGTCTTTTCAAGTGTAGACTCGGGGAGAAGTTGGTGGCCCTTTGAGATGCCAGGTTTC
TTTTTTATCTAGAAATGGCTGCAAGTGGAAAGCGGATAATATGTAGGCACCTTTGTAAATTCATATTGAGTAAATGA
ATGAAATTTGATTTCTGAGAAATCGAACCTTGGTCCCTAACCTTAATGTATGAGAGGCTCGCTGCTTGATGGT
GTGTACAACTCAGCTGAATGGGACTTTTTAGACAGATCTCATGACCTGTCCACCCCAAGTTTCATCATCATC
TCTTTTACACCAAAAGGTCTGACAGGTTGGTAACGTGTTCTTTGTGCCATTTTGGGGTGAGAAAGGTGGATGT
GATGAAGCCAATAATTTCAGGACTTATTCCTTCTTGTGTGTGTTTTTTTGGGCCCTTGACACAGAGTATGAAAT
AGCTTCCAGGAGCTCCAGCTATAAGCTTGGAAAGTGTCTGTGATTGTAATCAGTGGTGACAACACTCAGAATC
TAAATGGACTTCGTGTATTCTCAGCACTCAATTTGTTTTTAGCAGTTAATGGGTACATTTTAGAGTCTTC
CATTGTTGGAAATTAGATCCTCCCTTCAAAATGCTGTAATTAACAACACTTAAAAAAGTTGAATAAATATTGA
AACCTC

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FIGURE 1678

MAVPPTYADLGKSARDVFTKGYGFLIKLDLKTSENGLEFTSSGSANTETTKVTGSLKTYRWTEYGLTFTEKW
NTDNTLGTEITVEDQLARGLKLTFDSSFSPNTGKKNAKIKTGKREHINLGCDMDFDIAGPSIRGALVLGYEGWL
AGYQMFETAKSRVTQSNFAVGKTDDEFQLHTNVNDGTEFGGSIYQKVNKKLETAVNLAWTAGNSNTRFGIAAKY
QIDPDACFSAKVNNSSLIGLYTQTLKPGIKLTLSALLDGKNVNAGGHKLGLGLEFQA

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FIGURE 1679

CTCTTCCTTCGCTAACGCCTCCCGGCTCTCGTCAGCCTCCGCGCGCGCTCTCCTTAACACCGAACACCATGCCT
TCAATTAA GTTGCAGAGTTCTGATGGAGAGATATTTGAAGTTGATGTGGAATTGCCAAACAACTCTGTGACTATT
AAGACCATGTTGGAAGATTGGGAATGGATGATGAAGGAGATGATGACCCAGTTCCTCTACCAAATGTGAATGCA
GCAATATTAAAAAGGTCATTCA GTGGTGCACCCACCACAAGGATGACCCCTCCTCCTCTCTGAAGATGATGAGAAC
AAAGAAAAGCGAACAGATGATATCCCTGTTTGGGACCAAGAATTCTGAAAGTTGACCAAGGAACACTTTTGA
CTCATTCTGGCTGCAAACTACTTAGACATCAAAGGTTTGCTTGATGTTACATGCAAGACTGTTGCCAATATGATC
AAGGGGAAAACCTCTGAGGAGATTGCAAGACCTTCAATATCAAAATGACTTTACTGAAGAGGAGGAAGCCAG
GTACGCAAAGAGAACCAGTGGTGTGAAGAGAAGTGAAATGTTGTGCTGACACTGTAACACTGTAAGGAT

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FIGURE 1680

MPSIQLQSFIDGEIFAVDVEIARQSVTIKTTLEDLGMDDGDDPVPLPNVNAAVLKKVIVQWCTHHKDDPPPPEDDE
NKEKQTDDIPVWDQEFLLKVAQGTLLFELIRAANYLDIKGLLDVTCKTVANMIKGTPEEIRKTFNKNDFTEEEEA
QVRKENQWCEEK

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FIGURE 1681A

CGCTGGGATGGCCGCCACAGCTGTAGGTGCTGCTAGTGTTTAGCGCTGGTCTTGCCGGGCGTTGAGGGCAGCTC
AGCCTCCTTGTGTGCTCGGTTCGCGTGTGCGTGTACTCAAGGGCACCAGTATTCGCCGGTTCGGCAGCAGTGGT
CGGGAGTCACGCCACTATCGAAAACGATCGGCATCCCGGGTTCGCTCTGGAAGTCGGTCTAGAAAGTCGCTCACCC
TCAGACAAAGAAAGTAAACGTGGAGATGCAGACCGGTCTAGAAGTAGAGATAGAGATAGGAGGAGAGAGGCTC
CGTAGCAGGGATAAAAAGATCTCGGTCAAGGGACAGGAACGCTTGAGACGTTCCAGAAAGTAGAGAGAGAGAC
AGAAAGCCGAGAGCGAAGAAGATTCTCGAAGTAGACAGGAGACGCTCAAGGAGTAGAACCGGGGCGGGCGATCC
CGATCCTCCAGTCTCGGAAAATAAAGCAAGAAAATCAGAAATAGATCTAGGTCCTCAAGAGAAAATCAGTGTGGG
GAAAGTTCTAAAGAGAAGAAAAAGCAAGATGACAAAGGAGGATGAAAAAGAAAAGATGCTGGCAACTTTGAC
CAGATAAGCTGGAAGAAGAAATGAGAAAGCGAAAAGAAAGAGTAGAAAAATGGCGAGAAGACCACTGAAAAAG
GCTATTGGAACACATAGGAGAAGCTGAAAAAGGAAATCGAAGAGATGAAACAAAGGAAAAAGTGGAGTTTAGAGGAC
GATGATGATGACGAAGATGATCCTCGCAGAAGCTGAAAAGGAGGGAATGAAATGGAGGGTGAGGAGTTAGATCCA
TTAGATGCTTACATGGAAGAAGTGAAGAGGAAGTAAAAAATTTAATCATGAGAAGTGTAAAAGTGGTGGGGGA
AATGAAAAGAAAGTCTGGGCCAACGGTCACAAAAGTTGTCACTGTTGTGACAACCAAAAAGCAGTTGTGGATTCT
GATAAGAAGAAAGGTGAGCTGATGGAGAATGACCAGGATGCCATGGAGTATTCTTCAGAGGAGGAAGAAGTGTAT
CTTCAGACAGCCCTTACAGGGTATCAAAACAAACAGCGAAAGCTTTCTAGAACCGATTGATCATGGAATAATTTGAG
TAATGACCTTATGGAAGAACTTCTATGTTGAAGTTCAGAACTCAGCAAAATGCTCAAGAAGAGGTAATGTG
TTTCGATTGGAATGGAGGGCATTACAGTTAAAGGAAAGGTTGCCCAACCAATTAATCTCTGGTCCAGGT
GGAAATTTCCATGAAGATCTTAAATTCCTCAAGAAGCATGGCTATGAAAAGCCAGCGCACTTCAACCAAGCACT
ATTCCTGCTATAATGCTTGGACGAGATTGATTGGCATTGCCCCAACAGGAAGTGGAAAGACCATTTGCTTTTCG
TTGCCCATGTTTAGACACATCATGGATCAGAGGTCATTAGAGAAGGAGAGGGGCGCAATAGCTGTCATCATGAGCT
CCAAGTCGAGAAGTCGCTTTACAGATTCTAAAGAGTGTAAAGAAGTTTCCAGACTTTGGGAGCTTAGAGTGGTG
TGTGTTTACGGAGGAACAGGAATCAGTGAGCAGATTGCTGAGCTGAAAAGAGGTGCTGAAATATTGTTTGACACA
CCTGGTCAATGATTGACATGTTAGCCGCTAACAGTGGTCGGGTCACAAATCTCGAAGAGTGACATGTTGTT
TTAGATTGAAGCAGACAGAAATGTTTGACATGGGTTTGAACCCAGGTCATGCGCATCGGGTATAAGTTCGCTCT
GATCGACAGACGGTTATGTTTTAGCTACTTTCCCAAGAGCTATGGAAGGCTTTGGCTCGCAGGATCCTCAGTAAA
CCTATTGAAGTACAAGTTGGAGGCAGGAGTGTGGTTTGTCTAGATGTGGAGCAACAAGTGATTGTGATTGAAGAA
GAAAAGAAATCTTGAAGTTACTTGAGCTTTAGGCCATTATCAAGAGTCAGGATCTGTCATTATATTGTGGAAT
AAGCAGGAACATGCTGATGGTCTCTTAAAGGATTTAATGAGAGCATCTTATCCTTGCAATGTCCTCTCATGGAGG
ATTGATCAATATGACAGAGATAGCATATAAATGACTTTAAGAATGGGACCTGCAAACTTTGTTGGCTACCTCT
GTGCTGCCCGAGGCTAGATGTGAAACATCTGATCTTGATAGTAAATATAGCTGCCCAACCATTAATGAGGAT
TATGTACACAGAGCAGGGCGGAGTGTGGAAGAGCAGGAACAAGAGGTTATGCTTATACTTTTATACAGAGGATCAA
GCTCGCTATGCTGGTGACATAATTAAGCTCTTGAATTGTCAAGGACTGCGATACCTCCTGATTAGAGAACTG
TGGAGTGATTCAAAGATCAGCAGAAAGCTGAGGGGAAAAATAATAAAGAGAGTAGTGGGTTCTCTGGTAAGGGA
TTCAGTTGATGTGAACAGACAAGCTTTGGCTAATGAGGAGAAAGTACAAAGACGAGCTCTTGGTCTACAA
GATTCAGATGATGAGGATGCTGCAGTTGATATTGATGAGCAAAATGAAAGCATGTTTAAATCAAAGAGAGAGATA
AAGGATATGGCTGCTCTCTGCAACTCAAGTGTTCTGCTCCAAGTCAGAAATGCTGCAGAAATAGAAATTTGCT
AAGAGATTGGCTCTTAGAATCAATGCCCAGAAAGAAATTTGGGCATCGAGTCTCAGGTAGATGTGATGCAGCAGGCC
ACCAATGCAATTTAGGGGTGGCACCATTTCTGGCTCCCACTGTTTCTGCAAAACCATTCGAGAACAACCTTGCT
GAAAGAAATCTTGAAGGATCAATATGTGCCGTAGAGAAACAGAAAGAGAGACGAGTGGTGACAGCAAT
GAATCTTTAAGAGATATGAGAAGAAATAGAGATCAATGACTTCCCAAGAGCTGCTAGGTGGAAAGTTACCTCT
AAGGAAGCTCTGCAGAGAAATCAGTGAATACCTGGAAGCCGAATTAACAATCAGAGGAACTCTTCCCTCTGGC
AAAGAACCCAGGAAGGCGGAGGAGAAATTTACTTGGCAATTTGAAGTGCCAAATGAACCTGGCTGTGCAGAAAGCA
AAGCAGAAATCACCAGGCTCATAAAGAGAGCTGATCCGGCTGCAAAATTCATACCAACCAACAAATAAGGA
AGATACAAAGTCTTTAGACATCCGGAAGAAAGATTTTACCTGTGCTGGCTATGATGTATGTGGCAGTTGCTG
TCTGCAGTTTACAATGTATTGTAAATGAAGATTTTTTAAATCTATCTTGTCTGATTTTTTAAATATAAGAAAC
TGGTACTTGGTAAAGAAATCTGTCGTAAGTACCCCCACAATCAGTCAAACTAATTTAAAGCCAGGCTGTTTT
AGAGTATGATGCTCTTTAATGTAAACTCAAAATACAAATTTAAATGTCGGGATAATTTTATCTAGAGGTTAAAA
AATGGAAATATTGAACTTTCTATTGAAAGCAATAAAGTACAAAGTCGTTAAGGGGCTATTACGTTTATCCTGT

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FIGURE 1681B

ACTTTCAATGAAATTGTGATCATTTCCTAAGAAAAGGTAAAATTCACATCATATTTTGTGTCCCCACCTTGATG
TTACATGACTCTGGAACAATATGAACTGGATTTAAGAATGTTATAATAGAAGCTTACAAAATGG

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FIGURE 1682

MGRESRHYRKRSASRGRSGSRSSRSPSDKRSKRGDDRRSRSDRDRRRERSRSRDKRRSRSDRDKRLRRSRRE
RDRSRERRRSRSDRDRRRSRSSRGRSSRSPGNKSKKTENRSRSKEKTGGESSKEKKDKDDKEDEKEKDAGN
FDQNKLEEMRKRRERVEKWREBQRKKAMENIGELKKEIEEMKQGKWSLEDDDDDDDDPAEAEKEGNEGEEEL
DPLDAYMEEVKEEVKKFNMRSVKGGGNEKKS GP TVTKVVTVVTTKKA VVDSDKKKGELMENDQDAMEYSSEEEE
VDLQTALTGYQTKQRKLLLEPVDHGKIEYEPFRKNFYVEVPELAKMSQEEVNVFRLEMEGITVKGKGC PKIKSWV
QCGISMKILNSLKKHGYEKP TP IQTQAIPAIMSGRDLIGIAKTGSGKTI AFLLPFRHIMDQRSLEEGEP IAVI
MTP TRELA LQITKECKKFSKTLGLRVVCVYGGTGISEQIAELKRGA EI IVCTPGRMIDMLAANSGRVTNLRRVTY
VVLDEADRMFDMGFEPQVMRIVDNVRPDRQTVMFSA TFPRA MEALARRILSKP IEVQVGRSVVCS DVEQQVIVI
EEEEKKFLKLELLGHYQESGSVII FVDKQEHADGLLKDLMRASYP CMSLHGGIDQYDRDSI INDFKNGTCKLLVA
TSVAARGLDVKHLILVNVYSCPNHYEDYVHRAGRTGRAGNKGYAYTFITEDQARYAGDI IKALELSGTAVPPDLE
KLWSDFKDQQAEGKI I KKSSGFSGKGFKFDETEQALANERKKLQKAALGLQSDDEDAAVDIDEQ IESMFNSKK
RVKDMAAPGTSSVPAPTAGNAEKL EIAKRLALRINAQKNLGIESQVDVMQATNAILRGGTILAPTVSAKTIAEQ
LAEKINAKLNYVP LEKQEEERQDGGQNESFKRYEELEINDFPQTARWKVTSKEALQRISEYSEAAITIRGTYPF
PGKEPKEGERKIYLAIESANELAVQKAKAEITRLIKEELIRLQNSYQFTNKG RYKVL

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FIGURE 1683A

GCTCGGGCTCCGCTCTCGTCGCAACGAGATCTTTCGAGATCTTCTCCGCCCCGCTACCGGCGCCTCCTCTGCGG
CCACTGAGCGCGGAGCCGGCCTGAGCAGCGCTCTCGGTTGCGATACCCACTGGAAGGACTTAGGCGCTCGCGTGGA
CACCAGACGGCCCTCAGTAGCCTCGGCCCAAGAGGCGCTGTTTCCACTCGCTAGCCCGCCGGGGTCCGTTGCC
TGCTCTCGGTGGCCGAGCCCGGGCCGAGCCCGAGCAGTAGCCGGCGCCATGCGGTGGTGGGCATAGACCTGGGC
TTCGAGAGCTGCTACGTGCGTGTGGCCCGCGCCGGCGGCATCGAGACTATCGCTAATGAGTATAGCCAGCCGTGC
ACGCCGGCTTGCATTTCTTTGGTCTAAGAATCGTTCAATTGGAGCAGCAGCTAAAAGCCAGGTAATTTCTAAT
GCAAGAACACAGCTCCAAGGATTTAAAGATTCATGCGCCGAGCAATCTCTGATCCATTTTGGAGGCGAGAAAA
TCTAACCTTGCATATGATATTGTGCAGTTGCCTACAGGATTAACAGGTATAAAGGTGACATATATGGAGGAAG
CGAAATTTTACCACTGAGCAAGTGACTGCCATGCTTTTGTCCAACTGAAGGAGACAGCCGAAGTGTCTTAAAG
AAGCCTGTAGTTGACTGTGTGTTTTCGGTTCCTTGTCTTATCTGATGCGAAGACGATCAGTGATGGATGCA
ACACAGATTGCTGGTCTTAATGCTTGCATTAAATGAATGAAACCACTGCGATTTGCTCTTGCAATATGGAATCTAT
AAGCAGGATCTTCTGCTCTAGAAGAGAAACCAAGAAATGTAGTTTTGTAGACATGGGCCACTCTGCTTATCAA
GTTTCTGTATGTGCATTTAATAGAGGAAACCTGAAAGTTCTGGCCACTGCAATTTGACACGACATTTGGGAGGTAG
AAATTTGATGAAGTGTATTGATAATCACTTCTGTGAAGAATTTGGGAAGAAATACAAGTAGACATTAAGTCCAAA
ATCCGTGCAATTAATGACATCTCTCAGGAGTGTGAGAACTCAAGAAATGATGAGTGCAAAATGCTTCAGATCTC
CCTTTGAGCATTGAATGTTTATGATGATGTTGATGATCTGGAACATGAAATAGAGGCAAAATTTCTGGAGATG
TGCAATGATCTCTTAGCTAGAGTGGAGCCACCCTTCGTAGTGTTTGGAACAAACCAAGTTAAGAAAGAAAGAT
ATTTATGCGAGTGGAGATAGTTGGTGGTCTACAGCAATCCCTGCGTTAAAAGAGAAGATCAGAAATTTTCCGAT
AAAAGAACTTAGTACAACTAAATGCTGATGAAGCTGCTACGAGGCTGTCATTCGAGTGTGCCATCTTATCG
CTCGCTCTCAAAGTCAGAGAATTTCTATCACTGATGTAGTACCATATCCAATATCTCTGAGATGGAATCTCCCA
GCTGAAGAAGGCTCAAGTCACTGTGAAGTCTTTTCCAAAAATCATGCTGCTCCTCTTAAAGTTCTTCAATTT
TATAGAAAAGAACCTTTCCTCTTGAGGCCCTACTACAGCTCTCCTCAGGATTTGCCCTATCCAGATCTCTGCTATA
GCTCAGTTTTAGTTTCCAGAAAGTCACTCTCAGTCTGATGGCTCCAGTTCAAAGTGAAGTCAAAGTTCCAGTGA
AATGCTCATGGCAATTTAGTGTGCTCCAGTGCATCTTAGTGGAGGTTACAAAGTCTGAGGAAATGAGGAGCCA
ATGGAACACAGATCAGAATGCAAGGAGGAGAAAGAAAGATGCAAGTGGACACGAGGAGAACCACTGTTGAAGAGCAA
CAGCAGCAGACCCAGCAGAAAAATAGGCAGAGTCTGAAGAAATGGAGACCTCTCAAGCTGGATCCAAGGATAAA
AAGATGGACCAACCAACCCCAAGCCAAGAGGCAAAAGTGAAGACCACTACTGTGGACCTGCCAATCGAAGATCAG
CTATTATGGCAGATAGACAGAGAGATGCTCAACTTGTACATTGAAATGAGGTTAAGATGATCATGCAAGGATAAA
CTGGAAGAGGAGCGGAATGATGCTAAGAACGCACTGGAGGAATATGTGATGAAATGAGAGACAAGCTTAGTGGT
GAATATGAGAAGTTTGTGAGTGAAGATGATCGTAACAGCTTTTACTTTGAAACTGGAGATATCTGAAATTTGGTGT
TATGAGGATGGAGAAGACCAGCCAAGCAAGTTTATGTTGATAAGTTGGCTGAATTAAGAAATCTAGGTCAACT
ATTAAGATACGTTTCCAGGAATCTGAAGAACGACCAAAATTTATTTGAAGAACTAGGGAACACAGATCCAACAGTAT
ATGAAAAATATCAGCTCTTTCAAAGCAAGGAGGACCACTATGATCATTTGGATGCTGCTGACATGACAAAGGTA
GAAAAGAGGATGAAAGCAATGGAGTGGATGAATTAACAAGCTAAATCTGACGAACACGACAGATTTGACGATG
GATCCAGTTGTAAGTCAAAGAGAGTTGAAGCTAAAATTAAGGAGCTGACAGTACTTGTAGCCCTATAAATTC
AAGCCCAAACCAAGTGAACCTCCAAAAGAGGAACAAAAATGCAAGACAGAAATGGACAGTGGATGGACAA
GGAGACAACCCAGCGCCCCAGGCTGCTGAGCAGGGTACAGACACAGCTGTGCCCTCCGATTGACACAAGAGCTT
CCTGAATGGACATTTGATGATTTCCAACTTGTCTTATTAACACAGACTATTATAAGCTTTAAGTTGTCAAC
TTTGTCTTAAATATCACTAGCGCAAGTGAATCTGAAAGATTTCTAGTCAGTTTTTAGGGGATTTTCGGGGAGG
GGAAATAGGTAATGTATGGACATTTTCACTTCTAATAGTTAGATACAGAAATTAAGTGCAITGTATCTTTTTC
ATAATGGTACTATTAGAAAGCCAGTTAGTCTTACTGAGCTATGCTTCACTCCTTTATGTTTAACTATGTGCT
ACAAGAATAAGTTTGTTTTGAAGATTGAGCTATAGCTACAGCTCTAGCTATCCAGCAGACTTTTCCATTATGACT
TACATGTGAGGAGCTCTAATATGCTTTAAAAATCTGTTGTGGAGATTGCTTTAATGCTCCCTGCTGTTGGTGG
GGATGGGGGCCCCCTTTTGTGAGGCTGGAGCATGGCACGGCATGGATTAACACGGCAGAGGAACAAAGGTGTG
CTCTGAGCTTCTTCATATTTCACTTCCACCTCACCCTGTTGTTCTCTTCCCTCTCTCCCAATAAAGGGGCTCCCAT
TATGAATGCCATGATCTCTCTTGGGAAAAATAGACCCCTTGCTAGAGTAAGTTGTTAACTGAGGCGCTTAAAC
CTGAGGCTCTTCCGAAAGATGTTTCATGAATACCCCAAGCATCAAGCTTAAATATTTTTCAGAAATGATGAA
TTGGGTAGATATACTGTTGGATATAGCCATGGTAAATTTAACTGAGGAATTAATCCTTGTAAATTTTGGGTGTA

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FIGURE 1683B

AGATTTGTATCCTGGCCTGTTTATTACAGGTGGGAGATGTTCTGTATAATTTTGAGGTATAGCTTGAACCTCTAGA
ACAAGAGTTAAAAAGTTCTTTTAGCTCATTACAACTCACTTGTGTGTTAAGTGTTAATATCTGTCATGAACCTGC
CAATTTGTACGTGTTAAGCAGCTGACAGATGATGCAAAAAAATAAGATACACTGGATTGTACTGGATGAGTCT
GAAATTAGTGTTAAAGAAGTGTGGTGCTGATGTTATAACAACACCTCATTCTTAACGTGTGGCCAATGTCAGG
TATACCAAAGCATTCTCTGACTGCTTTTTGGGCGAGTGTGACAGGAGTGAGGCATTTTGAAACTCCAAGGGA
AGCCTGTGTTTGAGGCCAGAGTTGGTACCTGCTTTAAGAACTGTTACAGGCTTGTGGTAAATGTTTGAATCT
TGTAAAAATTGATATTCTGTATAACAGAGTGCCTCTCTGTACTTTTGGCCTATGTTGTTAGAAATAAGATGCT
ATCTTGCA TAGTTAGAATTAAGCGTTTGTCCATCTCTAGATAACATTGAAAAGTTTGAGTGTTACAGGCTCTAAA
GTGCAATGGAGAACAAATTGCTTAGGAGGAGGAAGGGGAAAGTATACTTATGTTGGTGTGAAGCATGCATGGAGG
CCTCGAGGCCACCAACAAGGCCAGGTTCTTAGCACATCCTCTGTTCTCTACCTGTCATGCTTCAAGAGTTCCAG
CTGGCCTGCTGTGAAGCCAGTAGCTATTTTAAAAGTGCTGGCTGCAGGATTAAGCCAACCTTTACAACCTGGCCC
AGACCGTAATGGCCATTCTTCTTAAAAAATTT
GGTGTGTGTGTGTGTGTGTGGGAAGGTTGTGGTGCTGGGATGGGGTGAAATTCAAGTTGAAACACATGA
TGTGGTCTGCTTGTCTCTGCTTAGACAGGCTTTAAGACCAATTGGATTTTCATGGAGGCCAGGACAGAGAGTGG
TAATTGATGGCTGTGTACAGACAAGCATTATCCAGGTTGCGTTATCCAACTGATTGTTAAAGCTCCAGGTC
ACGTTCTTACACTAAGAAAATCATTACAGTAAACATGAGACAAGTTTAGGAAAACTAATAAAATAAACCTGTCTT
AAACTTG

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FIGURE 1684

MSVVGIDLGFQSCYVAVARAGGIETIANEYSDRCTPACISFGPKNRSIGAAKSQVISNAKNTVQGFKRFHGRAF
SDPFFVEAEKSNLAYDIVQLPTGLTGIKVITYMEEERNFTTEQVTAMLLSKLKETAESVLKKPVVDVVSVPFCFYTD
AERRSVMDATQIAGLNCRLMNETTAVALAYGIYKQDLPALEEKPRNVFVDMGHSAYQVSVCAFNRGKLVLAT
AFDRTLGGKRFDEVLNVHFCEEF GKKYKLDIKSKIRALLRLSQECEKLLKMSANASDLPLSIECFMNDVDVSGT
MNRGKFL EMCNDLLARVEPPLRSVLEQTKLKKEDIYAVEIVGGATRIPAVKEKISKFFGKELSTTLNADAVTRG
CALQCAILSPAFKVRFSITDVPYPISLRWNSPAEEGSSDCEVFSKNHAAPFSKVLIFYRKEPFTLEAYYSSPQ
DLPYPDPAIAQFSVQKVTFQSDGSSSKVKVVRNVNHGIFSVSSASLVEVHKSEENEPMETDQNAKEEEKMQVD
QEEPHVEEQQQTPAENKAESEEMETSQAGSKDKKMDQPPQAKKAKVKISTVDLP IENQLLWQIDREMLNLY IEN
EGKMIMQDKLEKERNDAKNAVEEYVYEMRDKLSGEYEKPVSEDDRNSFTLKL EDTENWLVEDGEDQPKQVYVDKL
AELKNLGQPIKIRFQSEERPKLFEELGKIQQYMKIIS SFKNKEDQYDHLDAADMTKVEKSTNEAMEWMNNKLN
LQNKQSLTMDPVVKSKEIEAKIKELTSTCSP IISKPKPKVEPPKEEQKNAEQNGPVDGQGDNPGPQAAEQGTDIA
VPDSDDKKLP EMDID

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FIGURE 1685

GACTGTCTACATTAGTAATTCCCAACTTGGGTCCGAAAGTGAACCTTTTGCTGAAGCGAAGTAGCTAACCGCTTCC
ATGTGCAAGGCAGGTTCCAGACTTCGGGGTGAGGAGGATTAACTGAAGGACCCAGGGGAACCGGTGTGCTCACT
GATCCGCTCCAGGGCCACCGCCATGTCGAGCCGCGGTGGGAAGAAGAGTCCACCAAGACGTCCAGGTTGCGCA
AAGCAGGAGTCATCTTTCCCGTGGGCGGATGCTGCGGTACATCAAGAAAGGCCACCCCAAGTACAGGATTGGAG
TGGGGGCACCGTGTACATGGCCGCGCTCTGGAATACCTGACAGCGGAGATTCTGGAGCTGGCTGGCAATGCAG
CGAGAGACAACAAGAAAGGACGGGTACACCCCGGCACATCCTGCTGGCTGTGGCCAAATGATGAAGAGCTGAATC
AGCTGCTAAAGAGGTACCATAGCCAGTGGGGGTGTGTTACCCAAATCCACCCCGAGTTGCTAGCGAAGAAGC
GGGGATCCAAAGGAAAGTTGGAAGCCATCATCACACCACCCCGAGCCAAAAGGCCAAGTCTCCATCCCAAGAAGA
AGCCTGTATCTAAAAAAGCAGGAGGCCAAGAAAGGGGCCCGGAAAATCCAAAGACAGGGTGAAGTCAGTAAGGCAG
CCAGCGCCGACAGCACACCGAGGGCACACCTGCGGACGGCTTCACAGTCTCTCCACCAGAGCCTCTTCCTTG
GCCAGAAGCTGAACCTTATTCACAGTGAATCAGTAATTTAGCCGGCTTTGAGGTGGAGGCCATAATCAATCCTA
CCAAATGCTGACATTGACCTTAAAGATGACCTAGGAAACACGCTGGAGAAAGAAAGGTGGCAAGGAGTTTGTGGAAG
CTGTCCTGGAACCTCCGGAAAAAGAACGGGCCCTTGGAAAGTAGCTGGAGCTGCTGTCAGCGCAGGCCATGGCCTGC
CTGCCAAGTTTGTGATCCACTGTAATAGTCCAGTTTGGGGTGACAGCAAGTGTGAAGAATCTTGGAAAAAGACAG
TGAAAAACTGCTTGGCCCTGGCTGATGATAAGAAGCTGAATCCATTGCATTTCCATCCATCGGCAGCGGCAGGA
ACGGTTTCCAAAGCAGACAGCAGCTCAGCTGATTCTGAAGGCCATCTCCAGTTACTCTCGTGTCTACAATGTCTCT
CTTCCATCAAACGGTGTACTTCGTGCTTTTTCAGCGAGAGTATAGGCATCTATGTGCGAGAAATGGCCAAAGC
TGGACGCCCACTAGGCTGAGCAATGACAGAACCAGCTGCACCATGTACCCACCTTCAGTTTAAAAAGAAAAAAA
AATCCCTTCACTCCTACTGGGAGGTGGGACCCCTTTCATTTTCAGTTTGTGCTCATCTAGGAAAAATAAGGCTTT
GGTTTCCAGTTTAAATGTTTTGACCTTCTAAATGTTTTATGTTAGCACTGATAGTTGGCATTACTGTTGTTA
AGCACTGTGTTCCAGACCGTGTCTGACTTAGTGTAACCTAGGAGATTTTATAGTTTTATTTTAAAGAAACCTGA
TTGACGCACAGCAGTGGGGAGAACAGCGCTTTTACCTGTCACCGAAGCCAGGAAGCCCGGTTTGTAAAGCGTGTG
TTTGGTGTCTTATTTGATACATCTCCAGTGGCGTTCTTTTACTCTAATGTTCTTTTGGTTTCCCCCTCAGAAG
AATCATGAATTTGCAACAGACCTAATTTTGGTTACTTTTTGTCTTATTGATGGATTTGAAAATGAAGATTTAA
TAAGGCAAGCAGAAATCTGTGTCCTTAATTATATTGCAATTTGGAATTTGTGTGAGTTGATTAGTAAATGT
TAAACCGTTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1686

MSSRGGKKKSTKTSRSKAGVIFPVGRMLRYIKKGHPKYRIGVGAPVYMAAVLEYLTAEILELAGNAARDNKKGR
VTPRHILLAVANDEELNQLLKGVTIASGGVLPNIHPELLAKKRGSKGKLEAIITPPPAKKAKSPSQKKPVSKKAG
GKKGARKSKKQGEVSKAASADSTTEGTPADGFTVLSTKSLFLGQKLNLIHSEISNLAGFEVEAIINPTNADIDLK
DDLGNLTLEKKGGKEFVEAVLELRKKNGPLEVAGAAVSAGHGLPAKFVIHCNSPVWGADKCEELLEKTVKNCCLALA
DDKKLKSIAFPISIGSRNGFPKQTAAQLILKAISSYFVSTMSSSIKTVYFVLFDSIESIGIYVQEMAKLDAN

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FIGURE 1687

GGACGAGGGGGGAGCGGAGGTGGCGGCGGGCGGTAGCGGTGGCCTTGGTTGTCTTCCAGTCTCCTCGGCTCGC
CCTTTAGCCGGCACCCTCCCTTCCCTCCCCCTTCTCTCTTCTTCCCTTCCCTCCCTTCCCTTTTCCCTTC
CCCGTCCGTGAGCGGCGGGGGTGGCTCCAGCAACGGCTGGGCCCAAGCTGTGTAGAGGCCCTTAACCAACGATAAC
GGCGGCAGCGCGAAACCTCGGAGCTCGCAGGGCGGGGGCAAGGCCCGGGCCTTGGAATGGAGAATTCTCAGTT
GTGTAAGCTGTTCATCGCGCGCCCTCAATGTGCAGACGAGTGAGTCGGGCGCTCGCGGCCACTTTGAGGCCCTTGG
GACTCTGACGGACTCGGTGGTGGTGGTGAATCCCGAGACCAAGCGCTCCCGTTGCTTTGGCTTCGTGACCTACTC
CAATGTGGAGGAGGCGGACGCCCATGGCCGCTCGCCCATGCCGTGGACGGCAACACTGTGGAGCTGAAGCG
GGCGGTGTCCCGGAGGATTGCGCGCGGCCCGGTGCCACGCCAAGGTTAAGAAGCTCTTTGTGCGGAGGCCCTAA
AGGAGACGTGGCTGAGGGCGACCTGATCGAGCACTTCTCGCAGTTTGGCACCGTGGAAAAGGCCGAGATTATTGC
CGACAAGCAGTCCGGCAAGAAGCGTGGATTGGCTTCGTGTATTTCCAGAATCAGCAGCGCGGAGACAAGGCCGC
GGTGGTCAAGTTCATCCGATTCAAGGCCATCGCGTGGAGGTGAAGAAAGCAGTCCCCAAGGAGGATATCTACTC
CGGTGGGGGTGGAGGCGGCTCCCGATCTCCCGGGCGGCCGAGGCGGCCGGGGCGCGCGCGGTGGTCGAGACCA
GAACGGCCTTTCCAAGGGCGGCGGCGCGGTTACAACAGCTACGGTGGTTACGGCGGCGGCGGAGGCGCGGCTA
CAATGCCTACGGAGSGCGGCGGCGGCTTCGTCTACGGTGGGAGCGCACTACGGTAACGGCTTCGGCGGCTTCGG
CAGCTACAGCCAGCATCAGTCTCTTATGGGCCCATGAAGAGCGGCGGCGGCGGCGGTGGAGGCGAGTAGCTG
GGCGGTCGCAGTAAATAGTGGACCTTACAGAGCGGCTATGGCGGTGGGGTGGCTATGGAGGCAGCTCCTTCTA
AAGAAAAATTAAATTGCTGGGAGTGGCTATAGGGGTAGCTCTTTCCAACAGCCCAAGTGGGGTCAACTCTAA
GCCCCACCCCTCACACACACCCCTTCCCTGTTTTGCCCTTGGGGGAGCCACTTCAAGGCTGCTTACCTTTGG
GGGTGTTCTCTATTGCTGCCACCTCTCTTGCTCTCCCTCTGAAGATGGACTCGGGCCACATACACATTTT
TGTGTTACAGTCATTGATGGACTCTATTTTTTATTATTACTTGACCTTGGTCGTTTTTACTAGCAAAATGT
CTTGTTTAATTTGTGTTTTTGGGGGGAGGGAGGGAGTGAACCTTGCTGATTCTGTAGCAAAACCTGGGTGGGG
TTGGGTGGGGGTAGTTACTTTGTTGAAGGACTTGATAACCTGGCTACAGCGTTTTCTATGAAATCTACTTG
GATCCCATGCCGTAATTTGGAAGCATATGTACACAAATCATTTTTACGTTTTATTTTAAATAAATCATTGTGT
TGACCGTA

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FIGURE 1688

MENSQLCKLF IGGLNVQTSESGLRGHFEAFGLTIDCVVVVNPQTKRSRCFGFVTYSNVEEADAAMAASPHAVDGN
TVELKRAVSREDSARPGAHAKVKKLFVGGGLKGDVAEGDLIEHFSQFGTVEKAEI IADKQSGKKRGFGFVYFQNHD
AADKAAVVKFHP IQGHRVEVKAVPKEDIYSGGGGGSSRRGGRGGRGGRDQNGLSKGGGGGYSYGGYGG
GGGGGYNAYGGGGGGSSYGGSDYGNFGGFGSYSQHQSSYGPMKSGGGGGGGSSWGGRSNSGPYRGYGGGGGY
GSSSF

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CCGCGAGAACTTTGGGGAGCCGCGCGCCCATCCGCGCGCGCAGCCAGCTTCCGCGCGCGCAGGACCGGGCCCTCGC
CCAGCTCTCCGACGAGCGCGCGCTCCACGCGCGCGCGCGCCGACGGGCGAGTTCGGGGTCGCGCCCTGCACGCTTCT
CAGTGTTCTCCGCGCGCGCGCTGTACATCCCGCGAGCCGCCGCAAGCGTGTCCCTGCAGCTCCAGCGCCGGGCT
GCACCCCCCGCCCCGACACGCTAGCTCTCCAGCTCTGTGTCCAGGATCGCGCGCGGCAAGCGGCAGATGCAGCTGT
ATGTCCCCCGCTGCAGATCTCTGACCCCTTCGGATCTCTTCTCCTACTCGCCACCATGGAACATCTCACTTAAGTCT
GAGGAGATGATGTCTGTGACAAACGGGGCTCCCAAGTTCCTGCGCGCGCGGGCGGCCAGAGGGCAGCGCGAGC
AACAAGCAGCAGCAGCAGCAGCGGGGGCGGTGGAGCGCGCGGGCGCGGACGCAACAGAGCAGCAGCAGCAGCACC
TTCAACCTCTCAGGCGGACCGGCGAGCAGCTTCAGCAGCATTCAGCGCAGATGATCTTTTCTGACATCTCTCT
AACAACGAGAAGGTGCTGTTGGAGACCAGTTATCCCGACGCAAACCACTGCAGTGCACCCCATCACTTACTTGTGCG
CGCTTTTCTCCGTGGAGCTGACCCCAAGTCGGAACAACCTTGTGGCCGAGGCCCTCTTCAGCTTGTGTACTGCTG
CTAGTGAGCATGGAACCAACCCAGCCGCTCTGTGCTCTCAGACATCTCAGCGGCGCTCTCGCGCTCGGCTCC
CAGA GCCACCCCTGAGTGTGGCAGTGCCATCGCAACGACAGCATGTCCTATTAATCAGCGGCCAACCACTTCCCC
ACGCCGAACTGACATTTTCCCTGAGCCCAAAAGCGAGGCTTCCCGGCTCGCGAGGACAGCGGCTTCAGTAT
CGCGCTTCTGCTTACCTCGCGCCAAAGGTGGCTTCAGGTTCCCATGATCCCCGACTACCTGTTTCCACAGCAGC
CAGGGGGATCTGGGCTGGGCAACCCGACGCAAGGCCCTTCCAGGCGCTGGAGAGCGCCACCGACCGAGCTTCG
CTAAGGCTCTGTCTACTATTAAAGCGTTTGGCATCTCAGTGGCGCTCCAGAGCTGAAGGCCCTTAATACCGAG
TACCAGTCCCGAGCTCATCAAACCCAGCGCATGCGAAGTCTCCAAACCGGCCAGCAAGACGCCGCCCCACGAA
CGCCCTTTAGCTTGGCCAGTGGAGTCTGTGATTCGCGCTTCTCCGCTCCGACGAGCTACCCGCCACATCCG
ATCCACAGAGCGCAGAAGCCCTTCAGTGGCGCATCTGCATGCGCAACTTCAGCGCAGCGAGCCACCTCACCACC
CACATCCGACACCCACAGCGGCAACCTTCCGCTCGGCATCATCTGTGGAAGAAGTTTGGCAGAGGCGATGAA
CGCAAGAGGCATCAACAGATGCAATTTGCCGCAAGGACGAAGAAGCAACAAATGTTGTGGCTCTTCGCGC
ACCTCTCTCTCTTCTTCTTCAACCGTCCCCGGTTGCTACCTCTTACCCTGTCGCCGTCTACTCTTTATTCACCT
CGGCGACCACTCATACCCATCCCTGTGCCCACTCTTCTCTCTCCGCGTCTCTGACCTACCCATCCCTCCCT
TGCGAGCTGGCTTCCCTCGGCTCGGTGGCGACAGCATCTCTCTGTTCGCCCTGTCTTCGGGCCAGGTT
AGCAGCTTCCCTTCTCAGCTGTACCAACTCTTCAGCGCTCCACGGGCTTTCGCGATGACAGCAACGCTT
TCTCCCGAGGACAATTGAAATTTTGCCTAAGGCAAGGGGAAAGAAAGGAAAGGAGAAAGAAAGAAACAGAGA
QTTAAAGGACAGGAGGAGGAGATGCGCATAGGAGAGGAGGGTTCTCTTCTAGTGCAGATGGAGGTTCTCAGAGCCA
AGTCTCTCTCTCTACTGTGAGTGGAGGCTATTTGGCACAACCTCTTCTCGCCACTTCCCTTCCCCCAATTG
TATTTCTTTGACTTACGTGGAAGTGGAATCCAGTGTCTTCACTCTATCAAAGAAGTGTGATTTGCA
TGGATTTGGATAAATCAATTTCAGTATCATCTCCATCATATGCTTACGCCATGCCCTGTCTCGTCTCAATGCTAGAAAT
CGATTTGCAAAATGGGGTTTGGGCCCCCAGAGCCCTGCCCTGCACCTTGTACAGTGTCTGCTGATGATGATT
CAGTTTCTTGGGATCTTGATGTGAAGATAATTTGCATATTTATGTAATTTTGGAGTTAGGTCCTCACT
TGGGGGAAAAAAGGCAAGCAAGCAACCAATGTGATCTCTTATTTGTGATGCTGCTGACATAAG
TTTGAACCTTTTTTTTTGAACAGAGCTCCGAGTATTTCTCAGACGATGTGTCAGATGTTTTCGCTGATCTT
TTGTAATACTGCTTGAACGCTACTCTCAGATGTGGCAAAATATGGTTTGGTTTTCTTTTTTTTTTTGAAAGTG
TATTTCTTCGCTCTTTTGGTTTAAAAAGTTTCCAGCTTCTGGTGCGCTTTGTGTGATGCCCTTGTGATGGCTT
GAATCTCTCAATTGTGAGGACATGCTCACTCTAGCTTAAAGGGGCGAGGAGTGATGATTGGGGGAGGCTT
TGGGAGCAAAATAGGAAGAGGGCTGAGCTGAGCTTCGGTTCTCCGAAGTGAAGAAACAAATCTAAACAAAT
ATCTGAACCTCTCAAAGTCTATTTTTTAACTGAAATGTAAATTTATAAATTTACAGAGGTGGAATGTGT
AGTTACTCTACTGAGTAGGCGCGGATTTTTGTATGTTATGAACATGCAGTTTCATTATTTTGTGGTTCTATTTTACT
TGTACTTGTGTGTTTGTAAACAAAGTGAAGTTTGGCTTATAACATATGAATGCGCTTATTTGCCATGGGA
TATGTGGGTGATATCTCTTCAAAAATTAATAACGAAATAAGTATGCGCATGGG

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FIGURE 1690

MAAAKAEMQLMSPLQISDPFGSFPHSPTMDNYPKLEEMMLLSNGAPQFLGAAGAPEGSGSNSSSSSSGGGGGGGG
GSNSSSSSSTFNQADIGEQQPYEHLTAESFPDISLNNEKVLVETSYPSQTTTRLPPITYTGRFSLEPAPNSGNILW
PEPLFSLVSGLVSMTNPPASSSSAPSAASSASASQSPPLSCAVPSNDSSPIYSAAPTFTPTNTDIFPEPQSQAF
PGSAGTALQYPPPAYPAAGGFQVPMIPDYLFPPQQGDLGLGTPDQKPFQGLESRTOQPSSLTPLSTIKAFATQSG
SQDLKALNTSYQSOLIKPSRMKYPNRPSTKTPPHERPYACPVESCDRRFSRSDLTRHIRIHTGQKPFQCRICMR
NFSRSDHLTHIRHTGKPFACDICGRKFARSDERKRHTKIHLRQKDKKADKSVVASSATSSLSSYPSPVATSY
PSPVTTSYSPATTSYSPVPVTSFSSSPGSSSTYSPVHSGFPSPSVATTYSSVPPAFPAQVSSFFSSAVTNSFSAS
TGLSDMTATFSPTIEIC

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FIGURE 1691

ATGGCAAGAAAAGCTGGCAACTTCTATGTACCTGCAGAACCCAAATTGGCGTTTGTTCATCAGGATCAGAGGCATC
AATGGTGTGAGCCCAAAGCCCTACAAGGCGCTTCTCCCGGCCCCAGGCCATACAAGGCGCTTCTTCCCGGCG
CGGCTGGCTGGCGGCCCGCGGGCTGGGAGCCCGCCCGAGCACAGCACGCCCTGCCGGAGGTCTTTCAGCGGCC
CAGCCCGGACCTCCAGCCACAGGGCTCCGAGCCTCGCCGGCCGCTCTCCCTTGA

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FIGURE 1692

MARKAGNFYVPAEPKLAFVIRIRGINGVSPKPYKALPPGPRFIQGASFPARLAGGPRAGSPPGAQHALPEVFQRP
QPGTSSHTGLRASPAALP

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FIGURE 1693

GGCACGAGGGGAGCGCTTGTTTGTCTGCTCGTACTCCTCCATTTATCCGCCATGATAAGTGCCAGCCGAGCTGCA
GCAGCCCGTCTCGTGGGCGCCGAGCCTCCCGGGGCCATCGGCCGCCGCCACCAGGATAGCTGGAATGGCCTT
AGTCATGAGGCTTTTAGACTTTGTTTCAAGGCGGGATTATGCATCAGAAGCAATCAAGGAGCAGTTGTGGTATT
GATTTGGGTACTACCACTCCTCGCTGGCAGTTATGGAAGGTAACAGCAGCAAAAGTGCTGGAGAATGCCGAAGGT
GCCAGAACCAACCCCTTCAGTTGTGGCCTTTACAGCAGATGGTGAGCGACTTGTGGAAATGCCGGCAAGCGAGAG
GCTGTCCACCAACCCAAACAAACATACATTTTATGCTACCAAGCGTCTCATTGGCCGCGCATATGATGATCCTGAA GTA
CAGAAAGACATATAAAATGTTCCCTTTAAATTTGTCCTGCTCCAATGGTGATGCTGGGTGAGGCTCATGGG
AAATTGTATTCCTCGAGTCAGATTGGAGCATTTGTGTGTGATGAAGATGAAAGAGACTGCAAGAAAATTTACTTGGGG
CGCACAGCAAAAAATGCTGTGATCACAGTCCAGCTTATTTCAATGACTCGCAGAGACAGGCCCAATAAGATGCT
GGCCAGATATCTGGACTGAATGTGCTTCCGGTGATTATGAGCCACACAGTGTCTGCTTGGCTATGGCTAGAC
AAATCAGAAGACAAAGTCATTGCTGTATATGATTTAGGTGGTGGAACTTTTGATATTTCTATCCTGGAATTCAG
AAAGGAGTATTTGAGGTGAAATCCACAAATGGGGATACCTTCTTAGGTGGGGAAGACTTTGACCAGGCCCTTGCTA
CGGCACATTTGTGAAGGATTTCAAGAGAGAGACAGGGGTTGATTTGACTAAAGACAACATGGCACTTCAGAGGGTA
CGGGAAGCTGCTGAAAGGCTAAGTGTGAACCTCTCCTCATCTGTGCAGACTGACATCAATTTGCCCTATCTTACA
ATGGATTCTTCTGGACCCAAGCATTGTAATATGAAGTTGACCCGTGCTCAATTTGAAGGGATTGTCACTGATCTA
ATCAGAAGGACTATCGCTCCATGCCAAAAAGCTATGCAAGATGCAGAAGTCAGCAAGAGTGACATAGGAGAAGTG
ATTCTTGTGGGTGGCATGACTAGGATGCCCAAGGTTGACGAGACTGTACAGGATCTTTTGGCAGAGCCCAAGT
AAAGCTGTCAATCTGATGAGGCTGTGGCCATTGGAGCTGCCATTGAGGGAGGTGTGTTGGCCGCGCATGTACG
GATGTGCTGCTCCTTGAATGCTACTCCCTGTCTCTGGGTATTGAACTCTAGGAGGTGTCTTTACCAACTTATT
AATAGGAATACCACATTTCCAACCAAGAGAGGCCAGGTATTTCTACTGCCGCTGATGGTCAACGCAAGTGGAA
ATTAAGTGTGTGAGGTTGAAAGAGAGATGGCTGGAGACAACAACTCCTTGACAGTTTACTTTGATGGAAT
CCACCAGCCCTCGTGGAGTTCTCTCAGATTGAAGTTACATTTGACATTGATGCCAATGGGATAGTACATGTTTCT
GCTAAGAGTAAAGGCACAGGACGTGAGCAGCAGATTGTAATCCAGTCTTCTGGTGGATTAAAGCAAGATGATATT
GAAAAATATGGTTAAAAATGCAGAGAAATATGCTGAAGAAGCCGGCGAAAGAGGAACAGATTGAAGCAGTTAAT
ATGGCTGAAGGAATCATTACGACACAGAAACCAAGATGGAAGAAATTCAGGACCAATTTACCTGCTGATGAGTGC
AACAGCTGAAAGAGAGATTTCAAAAATGAGGGAGCTCCTGGCTAGAAAAGACAGCGAAACAGGAGAAAAATAT
AGACAGGCAGCATCCTCTCTTCAGCAGGCATCATTGAAGCTGTTCCGAAATGGCATACAAAAAGATGGCATCTGAG
CGAGAAGGCTCTGGAAGTTCTGGCACTGGGGAACAAAAGGAAGATCAAAAGGAGGAAAAACAGTAATAATAGCAG
AAATTTTGAAGCCAGAAGGACAACATATGAAGCTTAGGAGTGAAGAGACTTCTGAGCAGAAATGGGCGAACTTC
AGTCTTTTACTGTGTTTTGTCAGTATCTATATATAATTTCTTAATTTGTAATTTAGTGACCATTAGCTAGT
GATCATTTAATGGACAGTGTCTTAACAGTATAAAGTTCACAAATTTCTATGTCCCTAGCTGCTCATTTTTCAGC
TGCATGTAAAAGGAGGTAGGATGAATGATCATTATAAAGATTAACTATTTTATGCTGAAGTGACCATATTTTC
AAGGGGTGAAACCATCTCGCACAGCAATGAAGGTAGTCATCCATAGACTTGAATGAGCACAATATGCGGAT
GAGATCCTTCTGATAGCTTAGTACTGTCTGACTTGGCCTGTATGTACATGGGGTCTTCAACTGAGGCCCTTGCAA
GTCAAGCTGCTGTGCCATGTTTGTAGTGGGGCAGAGGAATCAGAACAAATGGGAACTTAGCTATTTATATTA
GGTACAGCTTATAAAACAGGTAGGAATGAGGCTAGACCTTAACTTCCTAAGGCATACCTTTCTGACTACCT
CTGCCCTGTGTCTGGCACCTACATCCTTGATGATTGTCTCTTACCCATCTCGGAATTTTTTTTTTTTTTAAATA
AATACAGAAAGCATCTTGAAAAA

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FIGURE 1694

MISASRAAAARLVGAAASRGPTAARHQDSWNGLSHEAFRLVSRDYASEAIKGAUVGIDLGTNSCVAVMEGKRA
KVLENAEGARTTFSVVAFTADGERLVGMPAKRQAVTNPNNTFYATKRLIGRRYDDPEVQDKINVPFKIVRASNG
DAWVEAHGKLYSPSQIGAFVLMKMKETAENYLGRTAKNAVITVPAYFNDSQRQATKDAGQISGLNVLRVINEPTA
AALAYGLDKSEDKVIAVYDLGGGTFDISILEIQKGVFEVKSTNGDTFLGGEDFDQALLRHIVKEFKRETGVDLTK
DNMALQVRVREAAEKAKCELSVVQTDINLPYLTMDSSGPKHLNMKLTRAQFEGIVTDLIRRTIAPCQKAMQDAEV
SKSDIGEVILVGGMTMPKVQQTVDLFGRAVSKAVNPDEAVAIGAAIQGGVLAGDVTDLVLLDVTPLSLGIETL
GGVFTKLINRNTTIPTKKSQVFSTAADGGTQVEIKVCQGEREMAGDNKLLGQFTLIGIPPAPRGVPQIEVTFDID
ANGIVHVSADKGTGREQQIVIQSSGGLSKDDIENMVKNAEKYAEEDRRKKERVEAVNMAEGIIHDTETKMEEFK
DQLPADECNKLKEEISKMRELLARKDSETGENIRQAASSLQASLKLFEWAYKKMASEREGSGSGTGEQKEDQK
EEKQ

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FIGURE 1695

GAAATGACTGCTGTCCATGCAGGCAACATAAACTTCAAGTGGGATCCTAAAAGTCTAGAGATCAGGACTGTGGCA
GTTGAGAGACTGTTGGAGCCTCTTGTGTACACAGGTTACACCCCTTGTAACACCAATAGTAAAGGGCCCTCTAAT
AAGAGAGAGAGTGGCTTCTAAGAAGGCCATGTTTGGCTGCATCTGTTGAAACAAGCACTAGAAATTTCTTGGAG
AAGGGGATATAAAATTGCCAAGGAGGAGCCAGTTTCTCAAGAGGAGCTTTGTGGCTGCTGTAGAGATGTTGCAAAAA
CAAGGTGATTGATGAAGGCTGCTGCAGGAGAGTGCAGATGATCCTGCTCTTCTGTGAAGCGAGGCAACATG
GTTCCGGCAGCTCGAGCTTTGCTCTCTGCTGTTACCCGGTTGTGATTTTGGCTGACATGGCAGATGTCTACAAA
TTACTTGTTCACGCTGAAAGTTGTGGAAGATGGTATCTTGAAGTTGAGGAATGCTGGCAATGAACAAGACTTAGGA
ATCCAGTATAAAGCCCTAAACCTGAAGTGGATAAGCTGAACATTATGGCAGCCAAAAGACAACAGGAATTGAAA
GATGTTGGCCATCGTGATCAGATGGCTGCAGCTAGAGGAATCCTGCAGAAAGACGTTCCGATCCTCTACTGCA
TCCCAGGCATGCCTACAGCACCCCTGATGTCGCAGCCTATAAGGCCAACAGGGACCTGATATACAAGACGCTGCAG
CAGGCGGTACAGGCATTCCAATGCAGCCAGGCCACTGCCTCAGACGATGCCTCAGCAGCAGGGTGGAGGA
GGAGGAGAACTGGCATAAGCACTCAATAACTTTGACAAAACAAATCATTGTGGACCCCTTGAGCTTCAGCGAGGAG
CGCTTTAGGCCTTCCCTGGAGGAGCGCTGCGAAAGCATCATTAGTGGGGCTGCCTTGATGGCCGACTCTGCCTGC
ACGCGTGATGACCCGTGTGAGCGAATTGTGGCAGAGTGTAACTGCTGTCCGCCAGGCCCTGCAGAGGCTGCTTTTCG
GAGTACATGGGCAATGCTGGACGTAAAGAAAGAAGTGATGCATCAATCTGCAATAGATATAAAGTACCAAGAAG
ACCAGGACTTGGCTAGACAGCTTCCGAAAAGCTGCATGAGCACCAGTTTTCAGATTCTTCTTGGAAACCAATGTT
CCACTTTTGGTATTGATTGAAGCTGCAGAAAGTGAAGAAATGAGAAAGAAGTAAAGGAGTATGCCAAGTTTTCGCT
GAACATGCCAAACAAATGATTGATTGAGTTGCCAACTTGGCCTGTTCCATCTCAAAATTAAGAAAGAGGTGAAGAGCT
GTTCCGAATGCTGCAAGCCAGTTAGAAGCCCTCTGCTCTCAGGTTATTAACTGCTGACTGGCTTTAGCAGCAAAA
CCACAGAGTAATCTGGCCCAAGAGAACATGGATCTTTTAAAGAAACAAATGGGAAAAACAAGTCCGCTGTTCTCACA
GATGCTGCGATGCAATTACTTCCATTGATGACTTCTTGGCTGCTCAGAGAAATCAATTTTGGAAAGATGTGAAC
AAATGTGTCATTGCTCTCAAGAGAGAGGATGGATGGCTGGACCGCAGCAGCTGGTGCAATTCAGAGCCGGGCA
GCCCGGGTCACTCAGTAGTCACTTCAGAGATGGACAACATATGAGCCAGGAGTCTACACAGAGAAGGTTCTGGAA
GCCACTAAGCTGCTCTCCAACACAGTCATGCCAGCTTTTACTGAGCAAGTAGAAGCAGCCGTGGAAGCCCTCAGC
TCGGACCCCTGCCCAGCCATGGATGAGAATGAGTTTATCGATGCTTCCCGCTCGGTATATGATGGCATCCGGGAC
ATCAGGAAGAGCAGTGCTGATGATAAGGACCCCTGAGGAGTTTGGATGACTTGACTTGATGAGACAGAAATTTTGAT
GTCAGAAGCAGGACGAGCGTCCAGACAGAAGCAGTACGCTGATAGCTGGCCAGAGTGCCTGGCGCATCTGGCT
CAGCTTCCCAGGAGCAAAAAGCGAAGATTGCGGAACAGGTGGCCAGCTTCCAGGAAGAAAAGACAGCTGGAT
GCTGAAGTGTCACAAATGGGACGACAGTGGCAATGACATCATTGTGCTGGCCAAGCAGATGTGCAATGATTATGATG
GAGATGACAGACATTACCCGAGGTAAAGGACCATCAAAAATACATCGGATGTCATCAGTGCTGCTCCAGAAAAAT
GCTGAGGACGAGTTCCAGGATGGACAGCTTGGCCGACACCATTCAGACCACTGCCCGCTCGGCTTGCAAGCAG
GACCTGCTGGCCTACCTGCAACGCATGCCCTCTACTGCCACCAGCTGAACATCTGACCAAGGTTCAAGGCCGAG
GTGCAAGATCTCGCGGGGAGCTTGTGCTCTGGGGTGGACAGCGCCTATGTCCTGATCAGGCGCCCAAGAAC
TTGATGAATGCTGTGGTGACAGACTGAAGGCATCTACGTCGCCCTCTACCAAAATACCAAAAGTCACAGGGTATG
GCTTCCCTCAACCTTCTGCTGTGTCATGGAAGATGAAGGCACACAGAAAAAGCCATTGGTGAAGAGAGAGAAAA
CAGGATGAGACAGACCAAGATTAAACGGGCATCTCAGAAGAGAGGCTGAACCGGTCAGGCGCCCTCAGCGAG
TTCAAAGCTATGGACAGCATCTAAGTCTGCCAGGCCGGCCGCCCCACCCCTCGGGGCTCCTGAAATCAGTCA
CTGTTCGTCACTCAATGAATTTGTCTAAATACAACTGATACATAGATTCCACAGGGAATGGGACAGCTGAACC
AGTCCAGGTGGTGAATTTTCCAAGAACATAGTTTAAGTGATTGAATAAAGCTGTTTGAAGATGAGAGAGCCCTACTTC
TAGCTGTATTTTGTATGCTTAAATAAAAAATAAAAATCATAAACAAAGAGATCCCACTTAGCTTGTAGTATA
ATGCTCTGACCAAGCGCAGATGCCCATCTTCTTAGTGATGGCGCGTTAGGGTTGAGAGAAGGGAAATTTGGCTC
AACTTCAGTTGAGAGGGTGCAGTCCAGACAGCTTGACTGCTTTTAAATGACCAAGATGACCTGTGGAAGCAAC
CTGGGACATCTTAGGAAGCAGTCCCTGGAGAAGGCATGTTCCCGAAGAGGCTCTCGGAGGGACAAACTCACTCAGT
AAAACATAATGTATCATGAAGAAAACTGATTTCTATGACATGAAATGAAAAATTTTATGCAATTTTATGAATTAC
TAATGTACGCTGCTGCAGGACATTAATAAAGTTGCTTTTAAAGGCTACAGTGTCTCGATGCCATTAATCAGAACAC
ACTTTTTTCTCTTTTCTCCAGCCTTCAATGCAAAATCATCATTGGGCTCACTTCTAATACTGCAGTGTTC

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FIGURE 1966

MTAVHAGNINFKWDPKSLEIRTLAVERLLEPLVTQVITLVNINSKGP SNKKRGRSKKAHVLAASVEQATENFLEK
GDKIAKESQFLKEELVAAVEDVRKQGDLMKAAAGEFADDFPCSSVKRGNMVRARALLSAVTRLLILADMADVYKL
LVQLKVVEDGILKLRNAGNEQDLGIQYKALKPEVDKLNIMAARKQELKDVGHRDQMAAARGILQKNVPILYTAS
QACLQHPDVAAYKANRDLIYKQLQAVTGISNAAQATASDDASQHQGGGGGELAYALNNFDKQIIVDPLSFSEER
FRPSLEERLESIIISGAALMADSSCTRDDRRERIVAECNAVROALQDLLSEYMGNAGRKRERSDALNSAIDKMTKKT
RDLRRQLRKAVMDHVSDSFLETNVP LLVLIEAAKNGNEKEVKEYAQVFRHANKLIEVANLACSI SNNEEGVKLV
RMSASQLEALCPQVINAALALAAPQSKLAQENMDLFKEQWEKQVRVLTDAVDDITSIDDFLAVSENHILEDVVK
CVIALQEKDVGDLDRTAGAIRGRAARVIHVVTSEMDNYEPGVYTEKVLKLLSNTVMPRFTEQVEAAVEALSS
DPAQPMDENEFIDASRLVYDGIRDIRKAVLMIRTPHEELDDSDFETEDFDVRSRTSVQTEDDQLIAGQSARAIMAQ
LPQEQQAKIAEQVASFQEEKSKLDAEVSKWDDSGNDIIVLAKQCMIMMEMTDFTRGKGPLKNTSDVISAAKKIA
EAGSRMDKLGRTIADHCPDSACKQDLLAYLQRIALYCHQLNICKVKAEVQNLGGELVVSQVDSAMSLIQAACKNL
MNAVVTVKASYVASTKYQKSQGMASLNLPAVSWKMKAPKPKLVKREKQDETQTKIKRASQKKHVNVPQALSEF
KAMDSI

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FIGURE 1697

GAATTCTGGGCGGGTTTGTACTATCCTCGGTGCTGTGGTGCAGAGCTAGTTCCTCTCCAGCTCAGCCGCGTAGST
TTGGACATATTTACTCTTTTCCCCCAGGTTGAATTGACCAAAGCAATGCTGATGGAGAAGCCTAGTCCCTGCT
GGTCGGGCGGGAATTTGTGAGACAGTATTACACACTGCTGAACCAAGCCCCAGACATGCTGCATAGATTTTATGG
AAAGAACTCTTCTTATGTCCATGGGGATTGGATTCAAATGSAAGCCAGCAGATGCAGTCTACGGACAGAAAGA
AATCCACAGGAAAGTAGTGTCACAAAACCTTCCAACTGCCACACCAAGATTTCGCCATGTTGATGCTCATGCCAC
GCTAAATGATGGTGTGGTAGTCCAGGTGATGGGGCTTCTCTCTAACCAACCAAGGCTTTGAGGAGATTCAATGCA
AACGTTTGTCTTGTCTCTGAGGGGTCTGTGCAAAATAATTTCTATGTTTACAATGATATCTTCAGATACCAAGA
TGAGGTCTTTGGTGGGTTTGTCTAGCCTCAGGAGGAGTCTGAAGAAGAAGTAGAGGAACCTGAAGAAAGACA
GCAAAACCTTGAGGTGGTACCTGATGATTCTGGAACCTTCTATGATCAGGCAGTTGTCAGTAATGACATGGAAGA
ACATTTAGAGGAGCCTGTTGCTGAACCAGAGCCTGATCTGAACCAGAACCAGAACAAGAACCTGTATCTGAAT
CCAAGAGGAAAAGCCTGAGCCAGTATTAGAAGAACTGCCCTGAGGATGCTCAGAAGAGTTCTTCTCCAGACC
TGACAGCATAGCTCAGACAGTACAGGAAGACTTGAGGACATTTTCTTGGGCATCTGTGACCAGTAAGAATCTTCC
ACCCAGTGGAGCTGTTCCAGTTACTGGGATACCACCTCATGTTGTTAAAGTACAGCTTCACAGCCCCGTCCAGA
GTCTAAGCCTGAATCTCAGATTCACCACAAAGACCTCAGCGGGATCAAAGAGTGGCAGAACACGAATAAATAT
TCCTCCCCAAAGGGGACCCAGACCAATCCGTGAGGCTGGTGAGCAAGGTGACATTGAACCCCGAAGAATGGTGAG
ACACCCTGACAGTCACCAACTCTTCAATTGGCAACCTGCCTCATGAAGTGACAAATCAGAGCTTAAAGATTCTT
TCAAAGTTATGGAACCGTGGTGGAGTTGCGCATTAACAGTGGTGGGAAATTACCCAATTTTGGTTTTGTGTGT
TGATGATTCGAGCTGTTTCAGAAAGTCCTTAGCAACAGGCCCATCATGTTTCAAGGTGAGGTCCTGCTGAATGT
CGAAGAGAAGAAGACTCGAGCTGCCAGGGAAGGCGACCGACGAGATAATCGCCTTCGGGGACCTGGAGGCCCTCG
AGGTGGGCTGGGTGGTGAATGAGAGGCCCTCCCGTGGAGGCATGGTGCAAAACCAAGGATTTGGAGTGGGAAG
GGGGCTTGGCCACGGCAGTAACTTTCATGGATCTTCATGACGCCATACAACCCCTGTTCCCAACAGAAATGGTGA
ATTTTCGACAGCCTTGGTATCTTGGAGTATGACCCAGTCTGTTATAAACTGCTTAAGTTTGTATAATTTTACT
TTTTTGTGTGTTAATGGTGTGTGCTCCCTCTCCCTCTTCCCTTTCCTGACCTTTAGTCTTTCACCTTCAATT
TTTGGAATGATATTTTAGGAATAACGGGACTTTTACCAGATTTC

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FIGURE 1698

MVMEKPSPLLVGREFVRQYYTLLNQAPDMLHRFYGKNSSYVHGGLD SNGKPADAVYGQKEIHRKVM SQNFTNCHT
KIRHVDAHATLNDGVVQVMGLLSNNNQALRRFMQTFLAPEGSVANKFYVHNDIFRYQDEVFGGFVTEPQE ESE
EEVEEPEERQQTPEVVPDDSGTFYDQAVVSNDMEEHLEEPVAEPEPDPEPEQEPEVSEIQE EKPEPVLEETAPE
DAQSSSPAPADIAQTVQEDLRTFSWASVTSKNLPPSGAVPVTGIPPHVVKVPASQPRPESKPESQIPPRPQRD
QRVREQRINIPPQRGPRPIREAGEQGDIEPRRMVRHPD SHQLFIGNLPHEVDKSELKDF FQSYGNVVELRINSGG
KLPNFGFVVFDDSEPVQKVL SNRPIMFRGEVRLNVEEKKTRAAREGDRRDNRLRGPGGPRGGLGGGMRGP PRGGM
VQKPGFGVGRGLAPRQ

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FIGURE 1699

GAGAGGCGCTGCTGACACCGCGGCCACACCGCGGCCACACCGCGCTGCCTCAGTCATGCCGAAGCACGAGTTCT
CTGTGGACATGACCTGTGGAGGCTGTGCTGAAGCTGTCTCTCGGGTCCTCAATAAGCTTGGAGGAGTTAAGTATG
ACATTGACCTGCCCAACAAGAAGGTCTGCATTGAATCTGAGCACAGCATGGACACTCTGCTTGCAACCTGAAGA
AAACAGGAAAGACTGTTTCCTACCTTGGCCTTGAGTAGCAGGGGCTGGTCCCCACAGCCCACAGGATGGACCAA
AGGGGGCAGGATGCTGATCCTCCGCTGGCTTCCAGACAGACCTGGGACTTGGCAGTCATGCCGGGTGATGGTGT
TCCTGCGGAGACCCTCAGTTGTCTATTCTTCTTAGCTTCCCTGCAATAAAATCAAGCTGCTTTTGTGG

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FIGURE 1700

GGAGAGCGCGCTCTGCCTGCCGCTGCCTGCCTGCCACTGAGGGTTCACGACCATGAGGGCCTGGATCTTCTT
TCTCCTTTGCCTGGCCGGGAGGGCCCTTGCGAGCCCTCAGCAAGAAGCCCTGCCTGATGAGACAGAGGTGGTGGA
AGAAACTGTGGCAGAGGTGACTGAGGTATCTGTGGGAGCTAATCCTGTCCAGGTGGAAGTAGGAGAATTTGATGA
TGGTGCAGAGGAAACCGAAGAGGAGGTGGTGGCGGAAAAATCCCTGCCAGAACCACCCTGCAAAACACGGCAAGGT
GTGCGAGCTGGATGAGAACCAACACCCCCATGTGCGTGTGCCAGGACCCACACAGCTGCCAGCCCCCATTTGCCGA
GTTTGAGAAGGTGTGCAGCAATGACAACAAGACCTTCGACTCTTCTGCCACTTCTTTGCCACAAAGTGCACCT
GGAGGGCACCAAGAAGGGCCACAAGCTCCACCTGGACTACATCGGGCCCTTGCAAAATACATCCCCCTTGCCTGGA
CTCTGAGCTGACCGAATTCCTCCCTGCGCATGCGGGACTGGCTCAAGAAGCTCCTGGTCACCCTGTATGAGAGGGA
TGAGGACAACAACCTTCTGACTGAGAAGCAGAAGCTGCGGGTGAAGAAGATCCATGAGAATGAGAAGCGCTGGA
GGCAGGAGACACCCCTGTGGAGCTGTGCGCCGGGACTTCGAGAAGAATATAACATGTACATCTTCCCTGTACA
CTGGCAGTTCCGGCCAGCTGGACCAGCACCCCAATTGACGGGTACCTCTCCACACCGAGCTGGCTCCACTGCGTGC
TCCCTCATCCCCATGGAGCATTGCACACCCCGCTTTTTCGAGACCTGTGACCTGGACAATGACAAGTACATCGC
CCTGGATGAGTGGGCCGGCTGCTTCGGCATCAAGCAGAAGGATATCGACAAGGATCTTGTGATCTAAATCCACTC
CTTCCACAGTACCGGATTCTCTCTTTAACCTTCCCTTCGTGTTTCCCCAATGTTTAAATGTTTGGATGGTTT
GTTGTTCTGCCTGGAGACAAGGTGCTAACATAGATTTAAGTGAATACATTAACGGGTGCTAAAAATGAAATTTCTA
ACCAAGACATGACATTTCTTAGCTGTAACCTTAACATTAAGGCCCTTCCACACGCATTATAGTCCCATTTTTC
TCTTCCATTTGTAGCTTTGCCATTGTCTTATTGGCACATGGGTGGACACGGATCTGCTGGGCTCTGCCCTTAA
CACACATTGCAGCTTCAACTTTTCTTTAGTGTCTGTTTGAACATAACTTACCGAGTCAGACTTTGTGTTTC
ATTTCAATTTAGGGTCTTGGCTGCCTGTGGGCTTCCCGAGGTGGCTGGAGGTGGCAAGGGAAGTAACAGACA
CACGATGTTGTCAAGGATGGTTTGGGACTAGAGGCTCAGTGGTGGGAGAGATCCCTCGACAACCCACCAACCAG
AACGTGGTTTGCTGAGGCTGTAACCTGAGAGAAAGATTCTGGGGCTGTGTTATGAAAATATAGACATTTCTCACAT
AAGCCAGTTTCATACCATTTCCCTCTTTACCTTTCAGTGCAGTTCTTTTTCACATTAGGCTGTTGGTTCAAACT
TTTGGGAGCAGGACTGTCAAGTTCTCTGGGAAGTGGTCAGCGCATCTCGAGGGCTTCTCCTCCTGTCTTTTG
GAGAACCAGGGCTCTTCTCAGGGGCTCTAGGGACTGCCAGGCTGTTTCAGCCAGGAAGGCCAAAATCAAGAGTGA
GATGTAGAAAGTTGTAATAATAGAAAAGTGGAGTTGGTGAATCGGTGTTCTTCTTCTCACATTTGGATGATTGTC
ATAAGGTTTTTACGATGTTCTCCTTTTCTTCAACCTTCCCTTTTTTCTCTATTAATCAAGAGAACTTCAAG
TTAATGGGATGGTCGGAATCTACAGGCTGAGAACTCGTTCACTTCAAGCATTTCATGAAAAGCTGCTTCTTAT
TAATCATCAAACTCTCACCATGATGTGAAGAGTTTCAAAATCCTTCAAAATAAAAAGTATGACTTAGAACT

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FIGURE 1701

GCCACGTGTCCGGCTCGGAGCCACGGCTGTCTCCCGGTCGCCGCCGCTGCGGTTGCTGCTGGGCTAACGGG
CTCCGATCCAGCGAGCGCTGCGTCTCTCGAGTCCCTGCGCCCCGTGCGTCCGTCTGCGACCCGAGGCGCTCCGCTGCG
CGTGGATTCTGCTGCGAACCGGAGACCATGGCCAAACAGCACAGGGTGCCAAGTACCGGGGCTCCATCCATGAC
TTCCAGGCTTTGACCCCAACAGGATGCCGAGGCTCTGTACACTGCCATGAAGGGCTTTGGCAGTGACAAGGAG
GCCATACTGGACATAATCACCCTCACGGAGCAACAGGACAGGCGAGGAGGTCTGCCAGAGCTACAAGTCCCTCTAC
GGCAAGGACCTCATTTGCTGATTTAAAGTATGAATTGACGGGCAAGTTTGAACGGCTTGATTGTGGGCGCTGATGAGG
CCACCTGCGCTATTGTGATGCCAAAGAAATTAAAGATGCCATCTCGGGCATTGGCACTGATGAGAAGTGCCCTCATT
GAGATCTTGGCTTCCGGACCAATGAGCAGATGCAACAGCTGGTGGCAGCATACAAAGATGCCTACGAGCGGGAC
CTGGAGGCTGACATCATCGGCGACACCTCTGGGCCACTTCCAGAAGATGCTTGTGGTCCGTGCCAGGGAACGAGG
GAGGAGGATGACGATGAGCGAGGACCTGGTACAACAGGATGTCCAGGACCTATACGAGGCGAGGGAACTGAAA
TGGGGAACAGATGAAGCCAGTTTCATTACATCTTGGGAAATCGCAGCAAGCAGCATCTTCGGTTGGTGTCGAT
GAGTATCTGAAGACCAAGGGAAGCCGATTGAAGCCAGCATCCGAGGGGAGCTGTCTGGGGACTTTGAGAAGCTA
ATGCTGGCCGTAGTGAAGTGATATCCGGAGCACCCCGGAATATTTTGCTGAAAGGCTCTTCAAGGCTATGAAGGG
CTGGGGACTCGGGACAACACCCCTGATCCGATCATGGTCTCCCGTAGTGAGTTGGACATGCTCGACATTCGGGAG
ATCTTCCGGACCAAGTATGAGAAGTCCCTCTACAGCATGATCAAGAATGACACCTCTGGCGAGTACAAGAAGACT
CTGCTGAAGCTGTGTGGGGGAGATGATGATGCTGCTGGCCAGTCTTCCCGGAGGCAGCGCAGGTGGCCATCAG
ATGTGGGAACCTTAGTGAGCTGGCCGAGTAGAGCTGAAGGGAACCTGTGCGCCACGCCAATGACTTCAACCCCTGAC
GCAGATGCCAAAGCGCTGCGGAAAGCCATGAAGGGACTCGGGACTGCAAGAACACAAATCATCGATATCATCAG
CACCCGACGAATGTCCAGCGGCAGCAGATCCGGCAGACCTTCAAGTCTCACTTTGGCCGGGACTTAATGACTGAC
CTGAAGTCTGAGATCTCTGGAGACCTGGCAAGGCTGATTCTGGGGCTCATGATGCCACCGGCCATTACGATGCC
AAGCACTTGAAGAGGCCATGGAGGAGCCGGCAGATGAAGAAGGCTCTTATTGAAATCCTGGCCACTCGGAC
AATGCTGAAATCCGGGCCATCAATGAGGCCATAAGGAGGACTATCACAAGTCCCTGGAGGATGCTCTGAGCTCA
GACACATCTGGCCACTTCAGGAGGATCCTCATTTCTCTGGCCACGGGGCATCTGTGAGGAGGGAGGAGAAAACCTG
GACGAGGCACGGGAAGATGCCAGGTGGCTGCTGAGATCTTGGAATAGCAGACACACCTAGTGGAGACAAAAT
TCTTGGAGACACGTTTATGACGATCCTGTGTACCCGGAGCTATCCGCACCTCCGGAGAGTCTTCAGGAGTTC
ATCAAGATGACCAACTATGACGTGGAGCACACCATCAAGAAGGAGATGCTTGGGGATGTCAGGGATGCATTTGTG
GCCATTGTTCAAAGTGTCAAGAACAAAGCCTCTCTTTTGCCGACAAACCTTACAAATCCATGAAGGGTGTGGC
ACAGATGAGAAGACTCTGACCAAGGATCATGGTATCCCGCAGTGAGATTGACCTGCTCAACATCCGGAGGGAAATC
ATTGAGAAAATAGACAGTCTCTCCACCAAGCCATTGAGGGTGACACCTCCGAGACTTCTCTGAAGGCCCTTGCTG
GCTCTCTGTGGTGGTGAGGACTAGGGCCACAGCTTTGGCGGGCATTCTGCCAAGAAATGGTTATCAGCACTCAGC
CGCCATGGCCAAAGCCTGATTGTTCCAGCTCCAGACTAAGGAAGGGGAGGGTGGGGGAGGGGTGGGTTGG
GCTCTTATCTCTAGGTGGAGCTTAGGAAACGCTCCCACTCCCAAGGGGAGCTGAGGGGCCAGCAGCGCTGAGCGGC
TGA AAAACCGTAGCAATAGATCCTGTCCACTCCACTCCCTCTGACCCCTCAGGCTTTCCAGCTCTCTCCCTT
GCTACAGCCTCTGCCCTGGTTTGGGCTATGTCAATCCAAAAACATCCTGAACCTCTGTCTGT

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FIGURE 1702

GTGACCCACGCGTCCGTGCCAGTCTCCGGGACTTTCCAGGGGTGGGGCGCGTGTCCGGGCCCCGGCACTT
CCTCGTCTCGGCGCCGGGTGCCCTGCCCCGCTCCAGGAGCCCTAGGAGTGTCTAGGGGGGCGGAGCCTTGCCCG
GGCCGCTGCCCGCTCCCTGGATTCCGGGTGGACGCGCAAGCGGGGCGCTGTGTCCCAAGCTCCCCGTCCTCG
CAGCGGGCACAGGCAGGGGCTGAGCTACCTCATGSAAGGGAGAGGACCGTACCGGATCTACGACCTCGGGGGCA
GCGTGCCCTCAGGAGAGGCATCCGAGCTTTTGAGCGCCTAGTGAAGGAGAATTCGGGCTGAAGGAAAAATGCG
AAGGGATAAAGATGTTAGGGGAGCTTTTGAAGAGTCCAGATGGAAGCGACCCAGGCTCCGGCAGAAAGCGAGAGG
AGCTAGTGAAGGACAACGAGCTGTCTCCACCACTTCTCCCTCCTTGGGCTCCTTCGACCCCTGGCTGAGCTCA
CAGGAAAGGACTCAATGTACAGCATCTCCACAGCCCTGCTATGCCAGTGACAAGCGACGACCACTGCCAGA
AGCCTCCATCCAGTGGCACTCCTCTGAATTTGAAGTGGTCACTCTCTGAGGAGCAGAATTCACCAGAGAGCAGCA
GCCATGCCAATGCGATGGCGCTGGGCCCCCTGCCCGTGAGGACGGCAACCTGATGCTGCACCTGACAGCGCCTGG
AGACCACGCTGAGTGTGTGTGCCGAGGAGCGGACACCGGCCAGCTCTCACCCACCTGGGGCCGATGGCCCTGG
AGTTCAACCGACTGGCATCCAAGGTGCAACAAGATGAGCAGCGCACCTCCATTCGACAGACCTGTGTGAGCAGC
TTCGGAAGGAGAACGAGGCTCTGAAGGCCAAGTTGGATAAGGGCTTGAACAGCGGGGATCAGGCTGCCGAGAGGC
TGGCGGAGGAAAAATTTGGAGCTCAAGAAAGTTGTTGATGAGCAATGGCAACAAAGAGGGTGCCTCTGGGCGGCCAG
GCTCACCGAAGATGGAAGGGACAGGCAAGAAGGCAGTGGCTGGACAGCAGCAGGCTAGTGTGACGGCAGGTAAAG
TCCCAGAGGTGGTGGCCTTGGCGCACCCGAGAAGAAGGTGAAGATGCTGAGCAGCAGCGCAGTGTGCTGTGG
AAGTGAACAAGCAGTGGGACCAAGCATTTCCGGTCCATGAAGCAGCAGTATGAGCAGAAGATCACTGAGCTGCGCTC
AGAAGCTGCTGATTTCGAGAAGCAGGTGACTGACCTGGAGGCCGAGCGGGAGCAGAAGCAGCGTGACTTTGACC
GCAAGCTCCTCTGGCCAAGTCCAAGATTGAAATGGAGGAGACCGACAAGGAGCAGCTGACAGCAGAGGCCAAGG
AGCTGCGCCAAAGGTCAAGTACCTGCAGGATCAGCTGAGCCCACTCACCCGACAGCGCTGATACCAAGGAAAAGG
AGATCCAGCGGCTCAACAAGGCCCTTGAGGAAGCACTGAGCATCCAAACCCCGCATCATCTCCACCAACAGCAT
TTGGGAGCCCAAGAAGGACAGGGGCCCTCCTAAGGAACAGGAGCTGGTCAACGAGAATGAGTTGCTGAACAACG
AGGTGAAGATCTTCGAGGAGGACTTCAGAGGGAGCGCAGTGATCGTGAGCGCATGAATGAGGAGAAGGAAGAGC
TGAAGAAGCAAGTGGAGAAGCTGCAGGCCCAGGTCAACCCTGTCAAAATGCCCACTAAAGCATTCAAAGATGAGG
AGAAGGCAAGAGAAGCCCTCAGACAGCAGAAGAGGAAGCAAAGGCCCTCAGGAGAGCGTTACCATGTGGAGCCCC
ACCCAGAACATCTCTCGGGGGCCTACCCCTACGCTACCCGCCATGCCACCATGGTGCCACACCATGGCTTCG
AGGACTGGTCCAGATCCGCTACCCCTCCCCCATGGCCATGGAGCACCCGCCCCCACTCCCAACTCGCGCC
TCTTCATCTGCCGGAATACACCTGGCCTCACTCCTGTGGAGGGGTTCGAAATCAAATCAGAGCTCCCAAGTGA
TGGACCCCTCCACAGCCAGGCTACAGAACAGAGTCTCCAAAAAATGACCGTGAGGGGCTCAGTGAGACCAGA
TTGTGTCAATTTGGCTCCACCTTCACTTTCGACAGACGAGCTGATCTCAATTGCCAAAAACTGAAGGCCATGTGAC
GGTGTGGCCAGAGCCTCAGCTGGATGAGAGGCTGAGATGGTGCCAGCTGTATACACCACTCCCTGAATGAGCT
GTTTACAGGAGTGGGAGGCTCCACCAGAAAGGCTTTCAATTGTACTCTGTGGGAGTGACTGGGAAAAACTCCT
TCCTGCTGCTGAGTGGAGAGAGGCCCTATCCGGCTTTGACCCCATCCTTCGAGAAGCTCCAGGAGCAGCAAT
CCTAAGAGTGGGAGGCGAGCCAGCCCTTCTTCAAACCTCCCGGAAGTGGTTTCAGGCCCTCTAGTTGGCCA
TGACCAATTTGTGTGTGTTAAATTTTGTCTCAAGCTCTGTAGCAGGACCTGCCCAACGCAACCCCTACCC
TCTGTGAGGAGCTGTGGGAAGTGTGGGTTTGCTCCAGAACAGAAGAAATGATGGATATTCTGGCTCTGGGGCC
CTCTCCACCACCACTCAGATAGCCTTGTGAAGCCATCAGAGTGGGAGAAGGCCATGCCAGCCAGCTCCGCGC
AGGGCGCCAGCCTGAAGCTGCCAGGCCCTGAGGTTAGACCCCTGACCCCATAGCTGGAGGCTGTGGTGCCAG
AAGCCAGATTAGGTTGGCTGTCCATCCCTGATAGCTATTGACAGCAATCATGGACATAAATCCAAGTTG

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FIGURE 1703

MEGRGPYRIYDPGGSVPSGEASAAFERLVKENSRLKEKMQGIKMLGELLEESQMEATRLRQAEELVKDNELLPP
FSPSLGSFDPLAELTGKDSNVTASPTAPACPSDKPAPVQKPPSSGTSSEFEVVTPEEQNSPESSSHANAMALGPL
PREDGNLMLHLQRLTTLTVCAEEPDHGQLFTHLGRMALEFNRLASKVHKNEQRTSILQTLCEQLRKENEALKAK
LDKGLEQRDQAAERLREENLELKKLLMSNGNKEGASGRPGSPKMEGTGKKAVAGQQQASVTAGKVPEVVALGAPE
KKVKMLEQQRSSELLEVKNQWDQHFRSMKQQYEQKI TELRQKLADLQKQVTDLEAEREQKQRDFDRKLLAKSKIE
MEETDKEQLTAEAKELRQKVLYLDQLSPLTRQREYQEKELQRLNKALEEALSIQTPPSSPPTAFGSPEGAGALL
RKQELVTQNELLKQQVKIFEEDFQRERSDRERMNEEKEELKKQVEKLQAQVTLSTNAQLKAFKDEEKAREALRQQK
RKAKASGERYHVPHPEHLCGAYPYAYPPMPAMVPHGFEDWSQIRYPFPPMAMEHPPPLPNSRFLHLPYTWRL
PCGGVRNPNQSSQVMDPPTARPTEPESPKNDREGPQ

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FIGURE 1704

AGCCAAAAGAGGAAGGGACGGCCCTCCACGTCACAGGGACCTGACTTCCACCTCTCTGCCAGATTGCTTAT
GTCACTGTGCCCCGGGACGGGAGGTGGGGAGCTGAGGGCAAGTCGCGCCCGCCCTGAAATCCCAGCCGCTA
GCGATTGGCTGCAAGGGTCTCGGCTTGGCCGCGGATTAATCACACCCGAGGGCTTGAAGGTGGCTGGGAGCGCC
GGACACCTCAGACGGACGGTGGCCAGGGATCAGGCAGCGGCTCAGGCGACCTGAGTGTGCCCCACCCGCCAT
GGCCCGGCTGCTGCAGGCGTCTGCCTGCTTTCCCTGCTCCTGGCCGGCTTCGTCTCGCAGAGCCGGGGACAAGA
GAAGTCGAAGATGGACTGCCATGGTGGCATAAGTGGCACCATTACAGATACGGAGCCCTCACCATTGATGGGA
GGAGTACATCCCTTCAAGCAGTATGCTGGCAAAATACGTCTCTTTGTCAACGTGGCCAGCTACTGAGGCCGTGAC
GGGCCAGTACATTGAACTGAATGCACTACAGGAAGAGCTTGACCAATTCGGTCTGGTCATTCTGGGCTTCCCTG
CAACCAATTGGAAAAACGGAACAGGAGAGAACTCAGAGATCCTTCTACCTCAAGTATGTCGACACAGGTGG
AGGCTTTGTCCCTAATTTCCAGCTCTTTGAGAAAGGGATGTCAATGGAGAGAAAGAGCAGAAATTTACACTTT
CCTAAAGAACTCCTGTCTCCCACTCGGAGCTCCTGGGTACATCTGACCGCCTCTTCTGGGAACCCATGAAGGT
TCACGACATCCGCTGGAACCTTTGAGAAGTTCTGGTGGGCCAGATGGTATACCCATCATGCGCTGGCACCACCG
GACCAACGCTCAGCAACGTCAAGATGGACATCCTGTCTACATGAGGCGGACGCGCCCTGGGGGTCAAGAGGAA
GTAACTGAAGGCCGTCTCATCCCATGTCCACCATGTAGGGGAGGGACTTTGTTCAAGGAAGAAATCCGTGTCTCCA
ACCACACTATCTACCCATCACAGACCCCTTTCTCTACTCAAGGCCCCAGCCTGGCAAAATGGATGCATACAG
TTCTGTGTACTGCCAGGCATGTGGGTGTGGGTGCAATGTGGGTGTTTACACACATGCCTACAGGTATGCGTGATT
GTGTGTGTGTGCATGGGTGTACAGCCACGTGTCTACCTATGTGTCTTTCTGGGAATGTGTACCATCTGTGTGCCT
GCAGCTGTGTAGTGCTGGACAGTGACAACCCCTTTCTCTCCAGTTCTCCACTCCAATGATAATAGTTCACCTTATAC
CTAAACCCAAAGGAAAAACAGCTCTAGGTCCAATTGTCTGTCTAAGTATACCTCAACCTTGGGGCCAGCAT
CTCCCACTGCCTCCAATATTAGTAACTATGACTGACGTCCCCAGAAATTTCTGGGTCTACCACTCTCCCAACC
CCCCCTCTACTTCTGAAGGGCCCTCCCAAGGCTACATCCCCACCCACAGTTCTCCCTGAGAGAGATCAACC
TCCCTGAGATCAACCAAGGCAGATGTGACAGCAAGGGCCACGGACCCCATGGCAGGGGTGGCGTCTTCATGAGGG
AGGGGCCCAAAGCCCTTTGTGGCGGACCTCCCTGAGCCTGTCTGAGGGGCCAGCCCTTAGTGCAATTCAGGCTAA
GGCCCTGGGCAGGGATGCCACCCCTGCTCCTTCGAGGACGTGCCCTCACCCCTACTGGTCCACTGGCTTGAG
ACTCACCCCGTCTGCCAGTAAAGCCTTTCTGCAGCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1705

MARLLQASCLLSLLLAGFVSQSRGQEKSKMDCHGGISGTIYEYGALTDGEEYIPFKQYAGKYVLFVNVASYEGL
TGQYIELNALQEELAPFGLVILGFPCNQFGKQEPGENSEILPTLKYYVRPGGGFVFNFLFEKGDVNGEKEQKFYT
FLKNSCPPTSSELLGTSRDLFWPEPMKVHDIRWNFEKFLVGPDGIPIMRWHHRTTVSNVKMDILSYMRRQAALGVKR
K

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FIGURE 1706

AGCCTCGGGGCTTGACGGGATTGTGGCGGTCCCTCTCTCCCAATTCGGAAGCTACAGCTACCTCCGGACGCTCTCA
AGATGCGGACCTCTCTGGGTTCACACCTACAACAGGCAGAACTGGGAGGATGCGGACTTCCCATTCTGTGCC
AGACATGCTCTGGAGAAAACCATATATCCGAATGACCAAGAAAAGTATGGGAAGGAATGCAAAATCTGTGCCA
GGCCATTACAGTGTTCGCTGGTGCCTGGAGTCCGCATGCGTTTCAAGAAGACTGAAGTGTGCCAAACCTGCA
GTAAATTGAAGATTGCTGTGACAGCTGCCTCTTAGACCTAGAGTATGGCTGCCCCATCCAGGTTCTGTGACGCAG
GATTGTCTTTTAAAGATGACATGCCAAAGTCAGATGTCAACAAAGAGTACTATACAGAATATGGAGAGAGAGA
TTTCTAACTCTGATGGAACACGCCAGTTGGCATGCTGGGGAAGCCACATCTACCAGTGACATGCTGTCTCAAAC
TGGCCCGGACCACACCCCTACTACAAAAGGAATCGACCCACATTTGCTCCTTCTGGGTGAAAGGAGAGTGAAGA
GAGGAGAGGAATGCCATACAGACATGAGAAGCCTACAGATCCAGATGACCCCCCTTGCTGATCAGAATATTAAG
ACCGTTATTACGGAATCAATGATCTGTAGCTGACAAGCTTCTAAAGCGGGCTTCAACAATGCCTCGGCTGGACC
CACCAGAGGATAAACTATCACCACACTATATGTTGGTGGTCTAGGTGATACCATTACTGAGACAGATTTAAGAA
ATCATTTCTACCAGTTCGGAGAGATCCGGACGATCACTGTTGTGCAGAGACAGCAGTGTGCTTTTATCCAGTTTG
CCACACGGCAGGCTGCAGAAGTGGCTGCTGAGAAGTCCTTTAATAAGTTGATTGTAATGGCCGCAGACTGAATG
TGAATGGGGAAAGATCCAGGCAGCCAGAGGAAAAGAAAAGAGAAAGATGGAACCTACAGACTCTGGGATCAAAC
TAGAACCTGTTCAGGATTGCCAGGAGCTCTCTCTCTCTCTCGACAGAGAAGAAAGCCCTGTGCCAACTACT
TCAACTTGCCCCCAAGTGGTCTCCAGCTGTGGTGAACATTGCTCTGCCACGCCCCCTGGCATTGCTCCACCCC
CACCCCAGGTTTGGGCCACACATGTTCCACCCAATGGGACCACCCCTCCTTTATGCGGGCTCCAGGACCAA
TCCACTATCCTTCTCAGGACCCCTCAGAGGATGGGAGCTCATGCTGGAACACACAGCAGCCCCTAGCACCTTGTCA
CCACTCTGGGGCTCTGTGGAAGAAAGGGCACTTAAACTCCCACTAAATCTTGGAAATAAATATTTTTCTCTCC
CTTGATGTTTCCATGGTGAATGTGCTCAGATGTGAGCAGTCAGAGACTGACAGCCATGCTTTCTTATACTT
GTTCAAAGATCGATGACCGTAAATAAGCTGCGATTAAACAATCTGGTTACTGCTGTAACATGACTAATAAAAC
CGAACGCCGTGTCCCTTACCCTGTGGGGGACACGCAGATGAGTGAATTGGAATGTCCAGCAGAGTTACCTCC
CAATTATATGTTTATTTGTATATTTTTTGGTCGGGGGAAAAATTGACCTCGAGTAAAAAACCTTTGACCATT
TTATGTCCATTGGATACTTTCTTTTATCATCTTAAAAAAGATACTAGTACTAATCATTGTAGTGGCCATAAG
TGTGATTTAACTCTTGAAGTCACACCTCCGAAAGATGAGTAGAAACAGCACCAGCAGCCAGATCTTCTCT
TTCTCTCTCTTTCTCATTTATCTTAAAGGAATCTGACCATTTACGTTCTTACGGCCCCAAAAAAGACAAAA
ATAAAATTCCTTTTTTATTCCTGTCAACTGGATGGAAACACAAATTCATGGAGCTGTGTACCATCGAAGAAACC
TGGTGTCTGGCATGAAATTACTGTAAAGAACTTCTGTAAACACAGTTCTTTAAACAACTGAAATGAAAGCAAT
GGAGCGTCTGAATGAAAGACGTGACCTCTGCTGGGACTCTGATGGTCTTCAGCACTCACCTTCTGCTGTCTTCA
GTGTCTCATTTGTCATCCCTGCTTCTGTTTGGTCTTAGAGTGTGTTGGATATAACTGAATTTGATAGTGTAAAGGAA
ATTTGATGTGTTTTTGTGTTTTTAAATAATTAACCGGGTCAATTTT

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FIGURE 1707

MATSLGSNTYNRQNWEDADFPILCQTCLGENPYIRMTKEKYGKECKICARPFTVFRWCPGVMRFKKTEVCQTCS
KLKNVCQTCLLDLEYGLPIQVRDAGLSFKDDMPKSDVNKEYYTQNMEREISNSDGTRPVGMLGKATSTSDMLLKL
ARTTPYYKRNRPHCISFWVKGECKRGECPYRHEKPTDPDDPLADQNIKDRIYGINDPVADKLLKRASTMPRLDP
PEDKTITTLVVGGLGDTITETDLRNHFYQFGEIRITIVVQRQCAF IQFATRQAAEVAAEKSFNKLIVNGRRLNV
KWGRSQAARGKEKEKDGTTDSGIKLEPVVGLPGALPPPPAAEEEAANYFNLPPSGPPAVVNIALPPPPGIAPP
PPGFPHMFHPMGPPPPFMRAPGPIHYPSQDPQRMGAHAGKHSSP

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FIGURE 1708

CTCCGCCCTCTCCCACTCTCTCTTTCCGGTGTGGAGTCTGGAGACGACGTGCAGAAATGGCACCTCGAAAGGGGA
AGGAAAAGAAGGAAGAACAGGTCATCAGCCTCGGACCTCAGGTGGCTGAAGGAGAGAATGTATTGGTGTCTGCC
ATATCTTTGCATCCTTCAATGACACTTTTGTCCATGTCACCTGATCTTTCTGGCAAGGAAACCATCTGCCGTGTGA
CTGGTGGGATGAAGGTAAAGGCAGACCGAGATGAATCCTCACCATATGCTGCTATGTTGGCTGCCAGGATGTGG
CCCAGAGGTGCAAGGAGCTGGGTATCACCGCCCTACACATCAAACCTCCGGGCCACAGGAGGAAATAGGACCAAGA
CCCCTGGACCTGGGGCCAGTCGGCCCTCAGAGCCCTTGCCCGCTCGGGTATGAAGATCGGGCGGATTGAGGATG
TCACCCCATCCCTCTGACAGCACTCGCAGGAAGGGGGTGCCTGTTGGTCCCGCTCTGTGAACAAGATTCTCA
AAATATTTCTGTTAATAAATTGCCTTCATGTAAAAA

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FIGURE 1709

MAPRKGEKKEEQVISLGPQVAEGENVFGVCHIFASFNDTFVHVTDLSGKETICRVTTGGMKVKADRDESSPYAAM
LAAQDVAQRCKELGITALHIKLRATGGNRKTPGPGAQSALRALARSGMKIGRIEDVTPIPSDSIRRKGGRRRR
L

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FIGURE 1710

ACCAAGTGGGCGAGTGGCCTTCTGTGGACGAATCAGATTCCCTCCAGCACCGACTTTAAGAGGCGAGCCGGGG
GGTCAGGGTCCCAGATGCA CAGGAGGAGAAGCAGGAGCTGT CGGGAAGATCAGAA GCCAGTCATGGATGACCAGC
GCGACCTTATCTCCAACAA TGACAACTGCCATGCTGGGCCGGCGCCTTGGGGCCCCGGAGAGCAAGTGCAGCC
GCGGAGCCCTGTACACAGGCTTTTCCATCCTGGTGACTCTGCTCCTCGCTGGCCAGGCCACCACCGCCTACTTCC
TGTAACAGCAGCAGGGCCGGCTGGGACAACTGACAGTCACCTCCCAGAACCTGCAGCTGGAGAACCTGCGCATGA
AGCTTCCCCAAGCTCCCCAAGCCTGTGAGCAAGATGCGCATGGCCACCCCGCTGCTGATGCAGGCGCTGCCCATGG
GAGCCCTGCCCAAGGGGCCATGCAGAA TGCCACCAAGTATGGCAACATGACAGAGGACCATGTGATGCACCTGC
TCCAGAA TGCTGACCCCTGAAGGTGTACCCGCCACTGAAGGGGAGCTTCCCGGAGAACCTGAGACACCTTAAGA
ACACCATGGAGACCATAGACTGGAAGGTCTTTGAGAGCTGGATGCACCATTTGGCTCCTGTTTGAATGAGCAGGC
ACTCCTTGGAGCAAAAGCCCACTGACGCTCCACCGAAAGTACTGACCAAGTGCCAGGAAGAGGTCAGCCACATCC
CTGCTGTCCACCCGGGTTCA TTCAGGCCCAAGTGCAGCAGAAACGGCAACTATCTGCCACTCCAGTGCTATGGGA
GCATCGGCTACTGCTGGTGTGCTTCCCCAACGGCACGGAGGTCCTCCCAACACCAGAACCCGCGGGCACCAATACT
GCAGTGAGTCACTGGAAC TGAGGAGCCCGCTTCTGGGCTGGGTGTGACCAAGCAGGATCTGGGCCAGTCCCCA
TGTGAGAGCAGCAGAGGCGGTCTTCAACATCCTGCCAGCCCCACACAGCTACAGCTTCTTGGCTCCCTTCAGCCC
CCAGCCCTCCCCCATCTCCACCCCTGTACCTCATCCCATGAGACCCCTGGTGCCCTGGCTCTTTCGTACCCCTTGG
ACAAGACAAACCAAGTCGGAACAGCAGATAACAATGCAGCAAGGCCCTGCTGCCCAATCTCCATCTGTCAACAGG
GGCGTGAGTCCCAGGAAGTGCCAAAAGCTAGACAGATCCCCGTTCTCTGACATCACAGCAGCCTCCACACAAAG
GCTCCAAAGACCTAGGCTCATGGACGAGATGGGAAGGCACAGGGAGAAAGGATAACCTTACACCCAGACCCAGGC
TGACATGCTGACTGTCCTCTCCCTCCAGCCTTTGGCCCTTGGCTTTTCTAGCCTATTTACCTGCAGGCTGAGCC
ACTCTCTTCCCTTTCCCGAGCATACTCCCAAGGAAGACCAATGTTTCCACCCATAATCCTTCTGCCGACC
CCTAGTTCCCTCTGCTCAGCCAAGCTTGTTATCAGCTTTCAGGGCCATGGTTACATTAGAATAAAGGTAGTAA
TTAG

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FIGURE 1711

ATAAGATCTGTCCCCAACTCTCCAGATCTGTGACCCACATTCTCTCCATAGGTGAAAAAGGGCTGCTTC
AGGCACCACACCTCAGAAATCCCGGAAGCCCAAGAAAGGGCTGGGAACCCCAAGCCTCAACCTGGCGCTGCA
AAGCAACATCACCCAGAGCAAGAAGAAGAAGCTGGGGGCCGGGGAAGGTGGGAGGCCTCTGTTTCCCAGA
AAAGACCTCCACGACTTCCAAGGGGAAAGCAAGAGAGACAAGCAAGTGGTGATGTCAAGGAGAAGAAAGGGA
GGGTCTCTTGGCTCCCAAGGGGCCAAGGACGAGCCAAGAGGAGCTTCAGAAAGGGGATGGGGACGGTTGAAGG
TGGAGATCAAAACAACCCAAAGCAAGAAGGAGAAGAAGAAATCCGACAAGA

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FIGURE 1712A

GAAGGGCAGACAGAGTGTCCAAAAGCGTGAGAGCAGGAAGTGAGGAGAAGGTGGAGAAGAGAGAAGAGGAAGAGG
AAGAGGAAGAGAGGAAGCGGAGGGGAACTGCGGCCAGGCTAAAAGGGGAAGAGAGGATCAGCCCAAGGAGGAGGA
AAGAGGAACAAGACAACAGCCAGTGCAGAGGAGAGGAAGCTGTGTCCAGTGTCCCGATCCCTGCGGAGCTAGT
AGCTGAGAGCTCTGTGCCCTGGGCACCTTGCAGCCCTGCACCTGCCTGCCACTTCCCAACGAGGGCCATGGGCC
AGGAGTTCTGCTGCTCTCTGCTGGTGGCCACAGCTTGGCATGGTCAGGGAATCCCACTGATAGAGCCAGTGTCC
TGAGCTGGTGTGGAAGCAGGAGCAACGGTGACCTTGCAGTGTGTGGGCAATGGCAGCTGGAAATGGGATGGCCCC
CCCATCACTCACTGAGCCCTGTACTCTGATGGCTCCAGCAGCATCTCAGCACCACAACGCTACCTTCCAAAA
CAGGGGACCTATCGCTGCCTGAGCCTGGAGACCCCTGGGAGGCAGCGCCCATCCACTCTATGTCAAAAGA
CCCTGCCCGCCCTGGAACTGTCTAGCACAGGAGGTGGTGTGTGTCGAGGACCAGGACGCACTACTGCCCTGTCT
GCTCACAGACCCGGTGTGGAAGCAGGCGTCTGCTGTGTGCTGTGCTGTGGCGGCCCTCATGCGCCACACCAA
CTACTCCTTCTGCGCCTGGCATGGCTTACCATTCCAGGGCCAAAGTTCACTCAGAGCCAGGACTATCAATGCAG
TGCCCTGATGGGTGGCAGGAAGGTGATGCCATCAGCATCCGGCTGAAAGTGCAGAAAGTCATCCAGGGGCCCC
AGCCTTGACACTTGTGCTGCAGAGCTGGTGGGATTGAGGGGAGCTGCCAGATCGTGTGCTCAGCCAGCAG
CGTTGATGTAACTTTGATGTCTTCTCCAAACACAAACCAAGCTCGCAATCCCTCAACAATCTGACTTTCA
TAATAACCGTTTACAAAAAGCTCTGACCCCTCAACTCGATCAAGTAGATTTCCAACTGCGGCAACTACTCTG
CTGTGGCCACAACAGCTGAGGGACCACTCCACTCCATGTTCTTCCGGGTGTGACAGGTGCTACTTGAATCT
GAGCTCTGAGCAGAACCCTCATCCAGGAGGTGACCTGTGGGGAGGGGCTCAACCTCAAAGTCATGGTGGAGGCTA
CCAGCGCTGCAAGGTTTAACTGGAGCTACTTGGGACCCCTTTCTGACCACCAGCTGAGCCCAAGCTTGTCTAA
TGTATCCACCAAGAGCACATACAGGCACACCTTCACTCTCTGCGCCCGCTGAAGCCCTTGAAGCTGTGGCG
CTACTCCTTCTGCGCAGAAACCCAGGAGGCTGGAGAGCTCTGACGTTTGAGCTCACCCTTCGATACCCCCAGA
GGTAAGCGTCATATGGACATTCAACAGCTCTGCAACCCCTTTGTGTGCTGCTGGGTACCCCAAGCCAA
CGTGACATGGCTGCAAGTGCATGGCCACACTGATAGGTGTGATGAGGCCAAAGTGTGCAAGGTCTGGGATGACCC
ATACCCCTGAGGTCTGAGCCAGGAGCCCTTCCACAAGGTGACGGTGCAGACCTGCTGACTGTTGAGACCTTAGA
GCACCAACCAACCTACGAGTGCAGGGGCCACAACAGCGTGGGGAGTGGCTCTGGGCCCTTCATACCCATCTCTG
AGGAGCCCAACAGCATCCCCGGGATGAGTTCTCTTACACCAAGTGGTGGTGCCTGCATGTCCATCATGGCCTT
GCTGCTGCTGCTCTCTGCTGCTATTGTTACAGTATAAGCAGAAAGCCCAAGTACAGGTCCGTGGAAAGGACAT
CGAGAGCTATGAGGGCAACAGTTATATCTTTCATGACCCCAACGAGCTGCCTTACAACGAGAAGTGGGAGTTCCC
CCGGAACAACCTGCAAGTTTGGTAAGACCTCGGAGCTGGAGCCTTTGGGAAGGTGGTGGAGGCCACGGCCTTTGG
TCTGGGCAAGGAGGATGCTGTGCTGAAAGTGGCTGTGAAGATGCTGAAGTCCACGCCCATGCTGTGAGAAGGA
GGCCCTCATGTCCGAGCTGAAGATCATGAGCCACTGGGCCACGACGAAACATCGTCAACCTTCTGGGAGCCTG
TACCCATGGAGGCCCTGTACTGGTCACTCAGGAGTACTTGTGCTATGGCGACCTGTCTCAACTTCTGGGAAGGA
CTGTGAGGCCATGCTGGGCAACGCTGACCCCGCCAGGAGCCCGAGGAGGGCTGCACTATAAGAACATCCA
CCTCGAGAAGAAATATGTCCGAGGAGCAGTGGCTTCTCCAGCCAGGGTGTGGACACCTATGTGGAGATGAGGCC
TGCTCCACTCTTCTCAAATGACTCTTCTCTGAGCAAGACCTGGACAAGGAGTGGAGGCCCTGGAGCTCCG
GGACCTGCTTCACTTCTCCAGCAAGTAGCCACGGGCAATGGCCTTCTCGCTTCCAAAGATGATCCACCCGGGA
CTGGGACGCGGTAACTGCTGTGTACCAATGTGCTATGGCCAAGATTGGGACCTTGGGCTGGTATGGGACAT
CATGAATGACTCCAACTACATGTCAAGGGCAATGCCCTGCTGTGAAGTGGATGGCCCCAGAGAGCATCTT
TGACTGTGTCTACACGGCTCAGAGGACGCTGTGGTCTTATGGCATCTCTCTGGGAGATCTTCTCACTTGGGCT
GAATCCCTACCTCGGATCTCTGGTGAACAGCAAGTTCTATAAACTGGTGAAGGATGGATACAAATGGCCACGC
TGCAATTTGCCCAAAGAAATATATACAGCATCATGCAGGCTGCTGGGCCCTGGAGGCCCAACCAAGACCCACCTT
CCAGCAGATCTGCTCCTTCTCTCAGGACAGGCCCAAGAGGACAGGAGAGGCGGGACTATACCAATCTGCCGAG
CAGCAGCAAGAGCGGTGGCAGCGGACGACGACGAGCTGAGGAGGAGGAGCTCTAGTGAGCAGCTGACCTG
CTGCGAGCAAGGGGATATGCCCCAGCCCTTGTGCAAGCCCAACAACTATCAGTTCTGCTGAGGAGTTGACGACAG
GGAGTACCACCTCTCCCTCCCAAACTTCAACTCCTCATGGATGGGGCAGACCGGGGAGAACATACAAACTCT
GCCTTCGGTCATTTCACTCAACAGCTCGGCCAGCTCTGAAACTTGGGAAGGTGAGGGATTAGGGGAGGTCAAG
GGAATCCCACTCTCTGAGCATGGGCCATCATGCCAGTCAAGGGCTGGGGGCTGAGCCCTCACCCCCCCCTCCCT
ACTGTTCTCATGGTGTGGCTCTGTTTGTCTATGCCAACTAGTAGAACCTCTTCTTCAATCCCTTCTTCTTCA
TGGAAATGAGCTGACTTTATGCTATGAAGTCCCAGGAGCTACACTGATCTGAGAAAACAGGCTCTTTGGGG

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FIGURE 1712B

CTAGACAGACTGGCAGAGAGTGAGATCTCCCTCTCTGAGAGGAGCAGCAGATGCTCACAGACCACACTCAGCTCA
GGCCCCTTGGAGCAGGATGGCTCCTTAAGAATCTCACAGGACCTCTTAGTCTCTGCCCTATACGCCGCTTCAC
TCCACAGCTCACCCTCCACCCCCATACTGGTACTGCTGTAATGAGCCAAAGTGGCAGCTAAAAAGTTGGGGGTG
TTCCTGCCAGTCCCCTCATTTCTGGGCTAGAAAGCAGGGGACCTTGGCATGTGGCTGGCCACACCAGCAGGAAGC
ACAAACTCCCCCAAGCTGACTCATCTTAACCTAACAGTCACGCCGTGGGATGTCTCTGTCCACATTAAACTAACAG
CATTAAATGC

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FIGURE 1713

TTTTTCGGCTGGAACCATGGAGGGTGTAGAAGAGAAGAAGGAGGTTCTCTGCTGCCAGAAACCCTTAAGA
AAAAGCGAAGGAATTTGCGAGAGCTGAAGATGAAGCGCCTGAGAAAGAAGTTTGCCCAAAAGATGCTTCGAAAGG
CAAGGAGGAAGCTTATCTATGAAAAAGCAAAGCACTATCAAAAGGAATATAGGCAGATGTACAGGACTGAAATTC
GAATGGCGAGGATGGCAAGAAAAGCTGGCAACTTCTATGTACCTGCAGAACCCAAATTGGCGTTTGTCATCAGAA
TCAGAGGTATCAATGGAGTGAGCCCAAGGTTGAAAGGTTGTCAGCTTCTTCGCCCTTCGTCAAATCTTCAATG
GAACCTTTGTGAAGCTCAACAAGGCTTCGATTAACATGCTGAGGATTGTAGAGCCATATATTGCAATGGGGGTACC
CCAATCTGAAGTCAGTAAATGAACTAATCTACAAGCGTGGTTATGGCAAAATCAATAAGAAGCGAATTGCTTTGA
CAGATAACGCTTTGATTGCTCGATCTCTTGGTAAATACGGCATCATCTGCGTGGAGGATTGTATTGATGAGATCT
ATACTGTTGAAAAACGCTTCAAAGAGGCAAAATACTTCTGTGGCCCTTCAAATTGTCTTCTCCACGAGGTGGAA
TGAAGAAAAAGACCAACCAATTTTGTAGAAGGTGGAGATGCTGGCAACAGGGGAGGACCAGATCAACAGGCTTATTA
GAAGAATGAACTAAGGTGCTACCATGATTATTTTCTAAGCTGGTTGGTTAATAAACAGTACCTGCTCTCAAAT
TGG

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FIGURE 1714

ATGGCCGAGGCCAGGAAGCGCGGGAGCTACTTCCCTGATCTACCACCATCTGCTGCGGGCTGGCTATGTGCGT
GCGGCGCGGGAAAGTGAAGGAGCAGAGCGGCCAGTGGGTTGGGCCAGAAAGTGTGCTCGCAGGGGCCGAACCTTTGT
AATTCGCCGCTTCCCTTACCTCCACGCCCTTCTGGTAGCGGGTATTTAAGTTTCTTAAGTCTCCCGCCACGTGG
CTAGGCTCTGCGCGGCCCCCCCTGGGGCAAGGAGGTGCTGCGAGTCTCGGGGGTGGATTGCGACCAGCCCCCTCG
GGGAGCGGCTGGAAAAGGACCCCTACAGCCTCTTAGTTGAGCTGGAAGCTCAGGCCCTTAGCGATTGTCTGTACT
GAGACGCTCAGCTTTGGTACTCGAAGCTCGTGGTACAGTCATTTCTTACTTGATTAACTCAACTGTTAATCCGGTA
CTCAGGGTGCTTCTGGTGTTCGAATGAAGTGTTCCTGGCTCAGCCCGTAACCCCTCTGGACATCTATACACAC
TGGCAACAACACTCAGAGCTTGGTCGGAAGCGGAAGGCAGAGGAAGATCGGCCACTGCAAGCTAAGAAAAACCCGT
GTGTGAGACCCCATCAGCACCTCGGAGAGCTCGGAAGAGGAGGAAGAAGCAGAAAGCCGAAACCCGCAAGGCCAGT
AAGAGCCTTGACAGCTTTGGGAACAGGCTATGGAATATTGATTGTTCTAGGTTTCTATGACCCCTTCTCTCCTACT
TTCATGAAATGGGGGAAGCCAAAGGTCCAGTCTCCTAAGCTCCTGGTGTACGGATTGAATTGTGTTTCCCA
AAAGGTGTTGTGCTGAGCCTCTGGCTGACAGCTGTGTTTCTCTGCTCAGCAAGGCTTTAACCATAAAGAGGAG
AAATCGGCCAGACAGTGTCTGGTACTTTCTGCCAGTACTACTTCAAGAGTCAGTGTCCAGCTTCCGAACAGC
ATGGAGGCAGCTCTGAGTCATCCGAATCCAGTGGGCCCCACAGCCTGCTCAGCTTCGGCTACCTGTCTGGGAC
TGGGCCAAGCCGAGCTTCGTGGCCGACGGGCCCGGGAGGCTGGCGAGCAGCCCTCGGCCGCTCCGCCCCAGCCT
CCCCACATCATCTTCATCCTCACGGACGACCAAGGCTACACGACGTGGGCTACCATGGTTCAGATATCGAGACC
CCTACGCTGGACAGGCTGGCGGCCAAGGGGTCAAGTTGGAGAATATTACATCAGGCCATCTGCACGGCTTGC
CGGAGCCAGCTCCTCACTGGCAGGTACAGATCCACAGAGCTCCAGCAATTCATCTCCGCCACAGCAGCCG
AAGTGGCACTGGGCTTCTACCGGAAGGAGTGCTGCCCCACCCGTGGGGCTTCGACACCTTCTCGGGCTCGCTC
ACGGGCAATGTGGACTATTACACTATGACAAGTGTGATGGCCAGGCGCTTCGACCTGCACAGGGT
GAGAAATGTGGCTGGGGCTCAGCGGCCAGTACTCCCATATGCTTTATGCCCAGCGCGCCAGCCATATCTGGCC
AGCCACAGCCCTCAGCGTCCCTCTTCTCTATGTGGCTTCCAGGCAGTACACACACCCCTGCACTCCCTCGT
GAGTACCTGTACCCTACCGCACCATGGGCAATGTGGCCCGCGGGAAGTACGCGGCCATGGTGACCTGCATGGAT
GAGGCTGTGCGCAACATCACCTGGGCCCTCAAGCGCTACGGTTTCTACAAACACAGTGTATCATCTTCTCCAGT
GACAAATGGTGGCAGACTTTCTCGGGGGGCGAGCAACTGGCCGCTCCGAGGACGCAAGGGCACTATTGGGAAGGT
GGCGTGGCGGGCCTAGGCTTTGTCCACAGTCCCTGCTCAAGCGAAAGCAACGGACAAGCCGGGCACTGATGCAC
ATCACTGACTGTGTAACCGACCTGGTGGGTCTGGCAGGTGTGTAACCTCAGCAGCCGATGGGCTAGATGGCTAC
GACGTGTGGCCGGCCATCAGCGAGGGCCGGCCCTACACAGCAGCGAGATCTTCCCAACATTGACCCACTCTAC
AACCATGCCCAAGTGGCTCCCTGGAGGGCGGCTTTGGCATCTGGAACACCCGCGTGCAGGCTGCCATCCGCGTG
GGTAGTGTGAAGCTGTGACAGGAACCCCGGCTATGGCATTGGATCCCAACCCAGACACTGGCCACCTTCCCG
GGTAGCTGGTGGAACTGGAAAGCAATGGCCAGTGTCCGCCAGGCCGTGTGGCTTCAACATCAGTGTGACCCCT
TATGAACGGGAGGACCTGGCTGGCCAGCGGCCGTGATGTGGTCCGACCCCTGCTGGCTCGCCTGGCCGAATATAAC
CGCACAGCCATCCCGGTACGCTACCCAGCTGAGAACCCCGGGCTCCTCTGATTTAATGGGGTGCTTGGGGG
CCCTGGGCCAGTGATAGGGAAGAGGAGGAAGAGGAAGGGAGGGCTCGAAGCTTCTCCCGGGTGCTGCGAAGAAA
AAATGCAAGATTTGCAAGCTTCGATCCTTTTTCCGTAACCTAACACCAAGGCTATGTGCCAACGGATCTGA

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FIGURE 1715

LDRLAAKGVKLENYIPICTPSRSQLLTGRYQIHTGLQHSIIRPQQPNCLPLDQVTL PQKLQEAGYSTHMGKW
HLGFYRKECLPIRRGFDTFLGSLTGNDYYTYDNC DGPVC GFDLHEGENVAWGLSGQYSTMLYAQRASHILASH
SPQRPLFLYVAFQAVHTPLQSPREYLY

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FIGURE 1716

ATGGGGATAATCAGGCACAGGTCTTTCCGCAATGCGTTATGATGATTAAGAAGTTGCATATTTGTGAACTCG
CGGCAATCTGGCCTCTCTGTGATTTCACTACTGTGCACACTCCTCTCCTGCCCTCCACGACAGGCTTGCTGAAT
GACAACACCTTTGCCAGTGCAAGAAGGGGGTGCGTGTGGTGAACGTGTGCCGTGGAGGGATCGTGGACGAAGGC
GCCCTGCTCCGGGCCCTGCAGTCTGGCCAGTGTGCCGGGGCTGCACTGGACGTGTTTACGGAAGTAAGTGCCTGG
CAGCCTCAGCGTCAGGAGGACGGGAGAGATAGGGAGCAGAGAGGCCCATGGCAGGGAAGCCTGGCGTTTTACAG
AAAGCCTATAGCTTATTGTCTCTTTTCATCCATGGTAAAGGAGAAAACTGTGTTGCCAAAAACACACCTTTGTGG
TTTGAGGAGTCCTTGCAGGACCTGTACCTGCTTCTTGCCCGAGGTGTGGCTGTGCAGAGGGGCTCCCTAACTGC
ATCCTGAGGGTGCTCCCACTATGCACCCGTGTGCCAAGCCTGGACACCTGAGGGATCTGTGCCCAATGCTACTGGA
GCCAAGGCTGGGGCTACCTTTAGTGATAGTGTATTATTGTAATTATTGTAACCATTGTACAGAATGTCAGAC
TGGTATGCAGGTATAGCTCATTACCAGGAGGAAAAACACAGAAGTCTTTGTGCAGTTGCTGTGGTTTTGAGTTTC
TCTGGGATAGCTTGTATTTTGCAGCAAAATGAAAGCTTTGGACCTCTGCAGATGTCACTTGGAGGACAGTCAAA
GACATCTTCAGGTTCATGGTCATATTCATTATGGTGTTTGTGGCCTTTATGATTGAACGTACAACCTCTACTCC
TACTACATTGGTGCAAAACAAAATGAAGCCTTCACAACAGTTGAAGAGATTTTAAGACACTGTTCTGGGCTATA
TTTGGACTTGCTGAAGTGAATCAGTGGTCATCACTATAACCAAAATTCATTGAAAATATTGGTTATGTTTCGT
TATGGAGTCTATAATGTTACAGTGGTCATTGTTTGTCTAAATGTGTTAATTGCCATGATCAACAATTCATTCCAG
GAAATTGAGGATGATGCTGATGTGGAGTAG

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FIGURE 1717

MGII RHR SFRQCVM MIKEATFSDSVI IVIIVTIVTECPDWYAGIAHYQEENTGLCAVAVVLSFSGIACILPANE
SFGPLQMSLGGAVKDI FRFMVIFIMVFVAFMIGTYNFYSYIIGAKQNEAFTTVEESFKTLFWAIFGLAEVKSIVI
NYNHKFIENIGYVRYGVYNVTVVIVLLNVLIAMINNSFQEIEDDADVE

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FIGURE 1718

ATGCGGACTGCGACCCCGTGGCCCGCGGATGGGCAGCCGCGCTGGCGGCCACCACGCGCTGAGCCCCAGC
 CGCCTGTGCGGCGCTCCAGGAGAGGAGGAGCTGCGCGAGCTCAATGACCGGCTGGCGGTGTACATCGACAAGGTG
 CGCAGCCTGGAGACGGGAACAGCGCGCTGCAGCTGCAGGTGACGGAGCGGAGGAGGTGCGCGGCGGTGAGCTC
 ACCGGCCTCAAGGCGCTCTACGAGACCGAGCTGGCCGACGCGGACGCGCGCTCGAGACACGCGCCGCGAGCGC
 GCCAAGCTGCAGATCGAGCTGGGCAAGTGCAAGGCGGAACACGACCAAGCTGCTCCTCACTATGCTAAGAGGAA
 TCTGATCTTAATGGCGCCAGATCAAGCTTCGAGAATATGAAGCAGACTGAATTCGAAAGATGCAGCTCTTGCT
 ACTGCACCTTGGTGACGAAAAAAGTTTAGAGGGAGATTTGGAGGATCTGAAGGATCAGATTGCCAGTTGGAAGCC
 TCCTTAGCTGCAGCGAAAAACAGTTAGCAGATGAACTTTACTTAAAGTAGATTTGGAGAATCGTTGTCAAGCC
 CTTACTGAGGACTTGGAGTTTCGAAAAAGCATGTATGAAGAGGAGATTAAAGAGACCAAGAGGAAAGCATGAAACG
 CGCTTGGTAGAGTGGATTCTGGGCGTCAAATTGAGTATGAGTACAAAGCTGGCGCAAGCCCTTCATGAGATGAGA
 GAGCAACATGATGCCAAGTGAGGCTGTATAAGGAGGAGCTGGAGCAGACTTACCATGCCAAACTTGAGAAATGCC
 AGACTGTCAATCAGAGATGAATACTTCTACTGTCAACAGTGCCAGGGAAGAACTGATGGAAGCCGCATGAGAATT
 GAGAGCCCTTCATCCCAGCTTTCTAATCTACAGAAAGAGTCTAGAGCATGTTTGGAAAGGATTCAAGAATTAGAG
 GACTTGCCTTGCATAAGAAAAAGACAACCTCTCGTCGATGCTGACAGACAAAGAGAGAGATGGCGGAAATAAGG
 GATCAAATGCAGCAACAGCTGAATGACTATGAACAGCTTCTTGATGTAAGATTAGCCCTGGACATGGAATCAGT
 GCTTACAGGAACTCTTAGAAGCGAAGAAGAGAGGTTGAAGCTGTCTCCAAGCCCTTCTCCGCTGTGACAGTA
 TCCCAGGACCTCTCAAGTCGTAGTGTACGTACAACATAGAGGAAGCGGAAGAGGGTTGATGTGGAAGAAATCAGAG
 GCGAGTAGTAGTGTAGCATCTCTCATTCCGCTCAGCCACTGGAATGTTTGCATCGAAGAAATTGATGTTGAT
 GGGAAATTTATCCGCTTGAGAAACACTCTGAACAGGATCAACCAATGGGAGGCTGGGAGATGATCAGAAAAATT
 GGAGACACATCAGTCAGTTATAAATATACCTCAAGATATGTGCTGAAGGACGGCCAGACTGTTACAATTTGGGCT
 GCAAAAGCTGGTGTACAGCGCAGGCCCACTGACCTCATCTGGAAGAACAGCAACTCTGGGGGCACTGGCGAA
 GATGTGAAGGTTATATTGAAAAATCTCAGGGAGAGGAGGTTGCTCAAAGAAGTACAGTCTTTAAAAACAACATA
 CCTGAAGAAGAGGAGGAGGAGGAAGAAGCAGCTGGAGTGGTGTGAGGAAGAAGCTTTCCACCAGCAGGGAAC
 CCAAGAGCATCCAATAGAAGCTGTGCAATTATCTAAAAATTTCAACTGTCTTCTCAAAATAAAGAAGTATGGTA
 ATCTTTACCTGTATACAGTGCAGAGCCCTTCTCAGAAGCAGACAATATTTTATATTTCTTTATGTGAATTTTA
 AGCTGCAAAATCTGATGGCCTTAATTTCTTTTGAACACTGAAAGTTTTGTAAAAAGAAATCATGTCCATACACTT
 GTTGCAAGATGTGAATTTAGCACTGAACCTTAATAACTGTGTACTGTTCCGAAGGGGTCTCTCAAATTTTITGA
 CTTTTTTTGATGTGTGTTTTTCTTTTTTTTAAAGTTCTTATGAGGAGGGGAGGGTAATAAACCACTGTGCGT
 CTTGGTGTAAATTTGAAGATTGCCCATCTAGACTAGCAATCTCTTCAATTCTCTTGCTATATATAAACCGGTGC
 TGTGAGGAGGGGAAAAAGCATTTTTCAATATATTGAACCTTTGTACTGAATTTTGTGTAATGAAGCAATCAAGT
 TATAATTTTTTTTAAAAAGAAATTTGTGAAGAAGCAATATTAACCTAATCAACCATGTAAGCACTCTGGATGAT
 GGATTCACAAAAGCTTGGTTTTATGGTTACTTCTCTCTTAGAATCTTAATTCATGAGGAGGGTGGGGGAGGGAG
 GTGGAGGGAGGAGGGTTTCTCTATTAATGAATCGATTCTGTGTGTTTTTAAGATAGTGTAACCTTGCTTAAATTT
 CTTATGTGACATTAACAATAAAAAAGCTCTTTT

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FIGURE 1719

MATATPVPPRMGSRAGGPTTPLSPTRLRSRLQEKEELRELNDR LAVYIDKVRSL ETENSALQLQVTEREEV RGREL
TGLKALYETELADARRALDDTARERAKLQIELGCKAEHDQLLLN YAKKESDLNGAQIKLREYEAALNSKDAALA
TALGDKKSL EGDLEDLDKQIAQLEASLAAAKQLADETLLKVDLENRCQSLTE DLEFRKSMYEEIINETRRKHET
RLVEVD SGRQIEY EYKLAQALHEMREQHDAQVRLYKEELEQTYHAKLENARLSSEMNTSTVNSAREELMESRMRI
ESLSSQLSNLQESRACLERIQELEDLLAKEKDNSRRMLTDKEREMAEIRDQMQQQLNDYEQLLDVKLALDMEIS
AYRKLLEGEERLKLSPSPSSRVTVSRASSRSVRTTRGKRKRVDVEESEASSSVSISHSASATGNVCIEEIDVD
GKFIRLKN TSEQDQPMGGWEMIRKIGDTSVSYKYTSRYVLKAGQVTIWAANAGVTASPP TDLIWKNNQNSWGTGE
DVKVILKNSQGEEVAQRSTVFKTTIP EEEEEEEEAAGVVVEELFHHQQT PRASNRSCAIM

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FIGURE 1720

GGTCTCTGGTCTCCCTCTCTGAGCACICTGAGGTCCTTATGTCGTCAGAAAGCTCGAGAAGCTCAGGAGGATGAA
TTGCTGGCCCTGGCAAGTATTTACGATGGAGATGAATTTAGAAAAGCAGAGTCTGTCCAGGTGGAGAAACCAGG
ATCTATTTGGATTTGCCACAGAATTTCAAGATATTTGTGAGCGGCAATTCAAATGAGTGTCTCCAGAATAGTGCC
TTTGAATACACCATTGTCTTCTGCTCCACTTGTGCTGAACCTTGAAGTCCACCAGATTATCCATCCTCTTCC
CCACCTTCATTACACTTAGTGGCAAAATGGCTGTCACCAACTCAGCTATCTGCTCTATGCAAGCACTTAGACAAC
CTATGGGAAGAACCCGTGGCAGCGTGGTCTGTTTGGCTGGATGCAATTTCTTAAGGAAGAGACCTTAGCATAAC
TTGAATATTGTCTCTCCTTTTGAGCTCAAGATTGGTTCTCAGAAAAAAGTGACAGAGAAGGACAGCTCAAGCTTCT
CCCAACACAGAGCTAGATTTTGGAGGAGCTGCTGGAATCTGATGTAGACCAAGAGGAAATTTGGATGAGAGAGCA
GTGCAAGGATGTGGAATCACTGTCAAATCTGATCCAGGAAATCTTGGACTTTGATCAAGCTCAGCAGATAAAATGC
TTTAAATAGTAAATTTGTTCCGTGTCAGTATCTGTTCTGTGAGAAGCTGGGTAGTGAATGCATGTACTTCTTGGAG
TGCAGGCATGTGTACTGCAAAGCCTGTCTGAAGGACTACTTTGAAATCCAGATCAGAGATGGCCAGGTTCAATGC
CTCAACTGCCCAGAACCAAAGTGCCCTTCGGTGGCCACTCTGGTCAGGTCAAAGAGTTAGTGGAAAGCAGAGTTA
TTTGCCCGTTATGACCGCCTTCTCTCCAGTCTCTTGGACCTGATGGCAGATGTGGTGTACTGCCCCCGGCCG
TGCTGCCAGCTGCCGTGTGATGCAGGAACCTGGCTGCACCATGGGTATCTGTCCAGCTGCAATTTTGCTTCTGT
ACTTTGTGAGGTTGACCTACCATGGGCTCTCCCATGTAAGGTGACTGCAGAGAAATTAATGGACTTACGAAAT
GAATACCTGCAAGCGGATGAGGCTAATAAAGACTTTTGGATCAAAGGTATGGTAAGAGAGTGATTAGAAGGCA
CTGGAAGAGATGGAAAGTAAGGAGTGGCTAGAGAAGAACTCAAAGAGCTGCCCATGTTTGGAACTCCCATAGAG
AAATTAGAGGATGTAACAGATGACATGTACTGGCTGTATGCAATATTTCTGTGGATTTGCATGGGTTCTCTC
TCTAGAGCAAAACCTTTACAACATTTCAATGACCTGGTTCAACATGTTTAAACCGGCTGTTTATGCTGTGGAT
GTTGACGACGATATTTGGGAAGATGAGGTAGAAGACTAGTTAACTACTGCTCAAGATATGGAAGTGGATTGTTT
TCCCTAACTTCCGTCAGTACACAAAGTAACTTTGCGGATATTTAGGGTACTATTCATTCACCTTCTCTCGCT
AGAAGATATGGAAGAACGAGGTTTATATTTTCATGTGTTACTACTGAAGAAGGTGCATTGATACATTTTAAATG
TAAGTTGAGAAAAATTTATAAGCCAAAGGTTCAAGAAATTAACCTACAGAA

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FIGURE 1721

CGCGCGGCCCTTTCTAGCCGCTGTCCCAAGGGTTGGTCTCGCGCTTTCCGGCTGCGAGCTCTCTGTGGTGTGGCA
GCGACATGTTGGCGCCTCCCGGAACCTCTGGGCCGAGCTCTTCCCGGTACACTGGGAGCTAGCTCTGGAGGGTGA
CTCCTAAGTCCACAGCCAGATGGCGCTCAGACTACCTCCTCCACTTTGGTGGTCTCTGCTGCCTAACCTCGACA
GGTCAGGTCCCCATGGCCAGGCACGAGCGGGGTCCAAAGTCCCATGGATGGAAGGATGCCTTCCAATGSATGT
CTTCCCGGTCTCTCCCGAACCCCTATGGGATGCCATATCTTGGGGCACTCTGGCCGTGCTGGCCCTGCAGCTGG
CAAGCAGATCCACTTCCAGGATCCCTGCCAGCAGGACCTCAGCGGGTAGAACACTGCTCCTGGCACAGTCCCC
TGGACCGTTTCTTCTCATCTCCCTTGTGGCAACCATGCTCCTCACTGCGCAACACATCTCCCGAGCCCGATG
GCCAGCTCCACGGCACACTGGCCTCAGGGAACCCAGGCTTGGCCAGGAAGAAGCTCAGCTCAGCCCCGGAAT
TCTCACACAACCTTTGAGAGGAGCTCGTCTCAGGACCCCTCTGAGGAAGGTCCCGGTGATTTTGGCTTCCTGC
ATGCCAGTAGTAGCATCGAGTCCGAGGCAAAACAGCCCGCTCAGCCCACTGGTGAAGGAACAAAGATAAAT
CAAAAACCTCTTCCCTTGAGGAGGCTGTGACTTCCATTACGACGCTCTTCCAGCTCAGTGTTCATCGCTTTCA
ACTTCTGGGAACAGAGAACATGAAGAGTGGCGACCACACGCGACCTTTTCTTACTCCAGAAAGCTGCAGCCC
GCGGCTACAGCAAAAGCGAGTACAATGCGGGCTTGTCTATGAGCATGGCAGGACCCCCAGGGACATTAGCA
AGCGGGTCTTTATTATCAGTTGGCTGCCAGCCAGGGCCACAGCCTGGCTCAGTACCGCTATGCCAGGTGCCTAC
TACGAGACCCAGCCTCTCTGTGAACCTCAGCGGCAGAGGGCAGTGTCTTGTGTAAGCAGGCTGCAGACTCAG
GCTTGAGAGAGCCCAAGCTTTCCCTCGGGGTGCTTTTACCAGGAGCCCTACCTGGATGAGCAGAGAGCTGTGA
AATATCTTTGGCTTGACAGCAACAATGGGGACTCACAGAGCAGGTACCACTTGGAAATTGCTATGAGAAGGCC
TTGGTGTGAGAGGAATCTGGGAGAGGCCTTGAGATGTTACAGCAGTCAAGCCCTCTGGGAAATGAGGCCGCC
AGGAGAGGCTGCGAGCCCTCTTTTCCATGGGGGTGCAGCCCCGGGGCCAGCGACTGACAGTTACAGGACTGA
AGTCTTTCTCCAGCCCTCCTCTCGACGTTGAACACCTGCTGACAGGAACCTCAGCCTACCACTGCCTCGA
GCACAGGCAACCTTGGCTCCTCTGCAGAAGTGGGCATCTCGAGCCAGCTTGGAAAGCTCCAGCAGGGCTATT
CCCCACACCCCTACCCACTGGAAGGAGTGTGTGAAGACTAGGTTTGGCTTAGAGGTGAGATAAAACATAGTCCCT
GGTGCTCTTAGGGGCCAGAGCGGGCAGGAGGTTGGATAACAAAAATAGAGCATCAGCAACCCCTTCCAGGTAGA
AATTCAGCGGGAGTTCAGGTTCCCAAGCAATTTACGTACATGGCTGGTAAGTGACTGATCTTCCCCCGCTT
GGTAGCCTCACAGATGAGTCTTGGATGCATTACAGTCAITTTCTGGTCTGTGCACCAAGGATGCATTCACTGAC
CTATGAAAAACCTACTGAAGGGTCCAGAGACCTGGTGCTACCTTAGCCCTTTGTCTTGAGCAATAACTTAC
CTTCTCTCTTCTTATGCTGGGTTTTCTCACACTTAAATCTGTACTACTGTTTGCCAAATGCTGATGTGTGATC
CCTGGTTCAGAAGAAGATTTTAGATGGTATTCAAATTAATATTTCTATTAGTTATATATTTAATGTAATAT
AAAAATATGATTAGCATATTGACCTGTAGTTTGATAGATGTTCTGTCTAGGATAAAGCTAATGTAAAAAATAAT
AGTGAATCAGTTTAAAGAAAAACATAACGTAAGAGTGGGCACAGATCCAGAGAGGTAGCAAAATCAGAGGGGTG
GTTCCATGAATGGCTGACACTTAGAAACCTGTAATTAGGCCATCTCGAGACTAGCCCAACTTCACTCTGTG
CATCCCCGTGGGCTCATAAATCGTTTTCACTTACCTTTGATTGGAAGGAAGAAGTTTCTTGCCCAATGCCTG
GATGTGTCTGCTGACTTTCAGAACTTCTCACTCAGCCCTAAAGAGGGAGCCCTGTGGGTTCTCAGAGAGATATC
ACAATTTAGTCCCAAGAAAGACAGATACCCACCACTCTTAAAGCACTCTAAGCACTCGCCGATACAG
TCAAGAAAGAGGAAGTGTGTGAAGACCCAGGTCTGGCTCTGCCACTTGCTTGGCCATGTCACTTGAAGCTGGA
CCTGACTCCCTATATTGTTTCTCAGTTGTAGACCAAGGCAATGGTGTCTGCCCTCCTACCTTAGAAGACAAAT
GCAAGGGCATTTACCCACAGAGAGGACCTTTGTGCTCACTTTGGCCAGGAGGAGCTGATGCTCATGGTTGCATG
ACTTTATGAGTCTGCTGGGCCAGGGTGAGGACCTGGGCCCTCTGACTCTTGGCCAGAGTCTTGTCCATCAGTTC
ATACTGCAATTTTATGTGAAGCAATTTAGACTGTCTACCCATGGGAGAGTAATGTAGATTGAATGCTAGGAGT
CTTAAAGCTGGAGAGTATAGATTTTGGTCCCCATTGGGAAACATGTGCCAGAAATGTCTAGGTGTTTAATAA
AACAGATATTGGATTATCTC

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FIGURE 1722

MWRLPGLLGRALPRTLGP SLWRVTPKSTSPDGPQTSS TLLVPVFNLD RSGPHGPGTSGGPRSHGWKDAFQWMSS
RVSPNTLWD AISWGLAVLALQLARQIHFAQSLPAGPQ RVEHCSWHSP LDRFFSSPLWHPCSSLRQHILPSPDGP
APRHTGLREPRIGQEEASAQPRNF SHNSLRGAR PQDPSEEGPGDFGFLHASSS IESEAKPAQP OPTGEKEQDKSK
TLSLEEAVTS IQQLFQLSVS IAFNFLGTENMKSGDHTAAF SYFQKAAARGYSKAQYNAGLCHEHGRGTPRDISKA
VLYYQLAASQGHSLAQYRYARCLLRDPASSWNPERQRAV SLLKQAADSGLREQAFLGVLF TKEPYLDEQRAVKY
LWLAANNQDSQSRYHLGI CYEKGLGVQRNLGEALRCYQQAALGNEAAQERLRALF SMGAAAPGPSDLTVTGLKS
FSSPSLCSLNTLLAGTSRLPHASSTGNLGLLCSRSHLGASLEASSRAIPPHPYPLERSVVR LGFG

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FIGURE 1723A

GCCCTCCTGATTCTGGGGCCTCCAGGATGGAGCACCTGAGGCACAGCCAGGCCCTGGGGGGCAACGGCTACTG
 CTGCCCTCCATGCTGCTAGCAGCTGCTGCTCCTGCTGGCTCCATCCCCAGGCCACGCCACTCGGGTAGTGTAACAAG
 GTGCCGGAGGAACAGCCACCCACACCTCATTTGGGAGCCTGCGAGCCGAGCTATGGTTTCCAGATGTGGGGCAC
 CTGTACAAGCTAGAGGTGGGTGCCCGTACCTTCGCGTGGATGGCAAGACAGGTGACATTTTCACCAACCGAGACC
 TCATCGACCGTGAAGGGGCTCGTGAATGCCAGAACCAGCTCCCTGGTGATCCCTGCATCTCGAGTTTGAGGTA
 TCTATCACAGACCTCTGCGAGAATGGCAGCCCCGGCTGCTAGAGGGCCAGATAGAAAGTACAAGACATCAATGAC
 AACACACCCAACTTCGGCTCACCAGTCATCACTCTGGCCATCCCTGAGAACACCAACATCGGCTCACTCTTCCCC
 ATCCCCGTGGCTTCAGACCGTGATGCTGGTCCCAACGGGTGGCATCCTATGAGCTGCAGGTGGCAGGAGACCAG
 GAGGAGAAGCAACCAAGCTCATTTGTGATGGGCAACCTTGGACCGTGAGCGCTGGGACTCCTATGACCTCACCATC
 AAGGTGCAAGATGGCGGCAGCCCCACGCGCCAGCAGTGCCCTGCTGCGTGTACCGTGTCTGACACCAATGAC
 AACGCCCCCAAGTTTGAGCGGCCCTCCTATGAGGCCGAACATCTGAGAAATAGCCCCATAGGCCACTCGGTATC
 CAGGTGAAGGCCAATGACTCAGACCAAGGTGCCAATGCAGAAATCGAATACACATTCACCAAGGCGCCGAAGTT
 GTGAGCGCTTCTTCGACTGGACAGGAACACTGGACTTATCACTGTTTCAGGCGCCGGTGGACCGTGAGGACCTA
 AGCACCTGGCGCTTCTCAGTGCTTGTCTAAGGACCGAGGCACCAACCCCAAGAGTGGCCGTGCCAGGTGGTTGTG
 ACCGTGAAGGACATGAATGACAATGCCCCACCATTTAGATTCGGGGCATAGGGCTAGTGACTCATCAAGATGGG
 ATGGCTAAACTCAGAGAGTTGGCAGAGGAGACAGCTGTGGCCCTGGTGAGCGTGTCTGACCGAGATGAGGGA
 GAGAATGCAGCTGTCACTGTGTGGTGGCAGGTGATGTGCCCTTCAGCTCGCCAGGCCAGTGAGACAGGAGT
 GACAGCAAGAAGAGTATTTCCTGCAGACTACACCCCGCTAGACTACGAGAAGGTCAAAGACTACACATTTAG
 ATTGGGTGGTGGACTCTGGCAACCCCACTCTCCAGCACTAATCCCTCAAGGTGACGTTGGTGGAGCTGAAT
 GACAAAGCACTGTCTTCACTCAGAGTGTCACTGAGGTGCGCTTCCCCGAAACAAACAGCTCGTGAAGTGAAT
 GCTGAGATCACTGCGGATGATGCTGACTCTGGCTCTAATGCTGAGCTGGTTTACTCTCTGGAAGCTGAGCGGCT
 GCTAAGGGCCCTTTCACCATCTCACCCGAGACTGGAGAGATCCAGGTGAAGACATCTCTGGAATCGGGAACAGCGG
 GAGAGCTATGAGTTGAAGTGGTGGCAGCTGACCGGGGCACTAGCTCCAGGGCAGACGCCACTGTCTTGTGCT
 AATGTGCTGGACTGCAATGACAATGACCCAAATTTATGCTGAGTGGCTACAACCTTCTCAGTGATGGAGAACATG
 CCAGCACTGAGTCCAGTGGGCACTGGTGAATGCTGATGAGAGCAAGGGGGAGAATGCCAGGTGCAGCTCTCA
 GTGGAGCAGGACAACGGTGACTTTTGTATCCAGAATGGCAGGCAACCTCCTATCCAGCTGAGCTTTGATCGA
 GAGCAACAAGCAGCTACACCTTCCAGCTGAAGGCAGTGGATGGTGGCGTCCCACCTCGCTCAGCTTACGTTGGT
 GTCAACCATCAATGTGCTGGACGAGAAATGACAACGCAACCTATATCACTGCCCTTCTTAACACCTCTCACAAGCTG
 CTGACCCCCCAGACAGCTCTTGGTGAAGCGGTGAGCCAGGTGGCAGCGGAGCTTTGACTCTGGTGTCAATGCT
 GAGCTGATCTACAGCATTTGCAAGTGGCAACCTTATGAGCTCTTCCAGATTTGGGTACATCTCAGGTGCCATGCC
 CTGGAGAAGGAGATTGAGCGCGCCACCATGGGCTACACCGCGTGGTGGTGAAGGTGAGTGAAGCGCGGCAAGCCC
 CCACGCTATGGCAGACCTTTGGTGCCTTCTTATGTCAATGAGACTCTGGCCAAACCGCAGCTGTGGAGACCTC
 CTGGGCCACAGCCTGGACAGCGCGTGGATATGACATCTGCTGGGGATCCAGAATATGAGCGCTCCAAGCGGCT
 GGCAACATCTCTTTGGTGTGGTGGTGGTGGTGGTGGCGTGGCTGCTGAGCTCAGCTCGGCGGCTTCTTGGCGC
 TACTGCAGACAGCGGGAGGCCAAAGTGGTTACAGGCTGGTAAAGAGGAGACCAAGGACCTGTATGCCCCCAAG
 CCCAGTGGCAAGCGCTCCAAGGGAAACAAAGCAAGGCAAGGACCAAGTCCCCAAAGCCGTGAAGCCAGTG
 GAGGACAGGATGAGCCCGGGCTGCAAGATGCTCAAGTTCAACCTGATGAGCGATGCCCTGGGAGCAGTCCC
 CGCATCCACCTGCCCTCAACTACCCACAGGCGAGCCCTGACCTGGGCGGCCATCTTGCTCTTAACCTCCCACTG
 CCTTCCATCCAGCTGAGCCCACTCAGCTCAGCTCCTCAAGAGCAGCAGGTGGTACAGGACCTGCCACTTGCA
 AACACATTCGTGGGCACCGGGGACACACGCTCCACGGGCTCTGAGCAGTATCTCGACTACAGCTACCGCAACCAAC
 CCCCCAAATACCCAGCAAGCAGTTACCTCACCGCGCGTCACTTCTCGGCCACAGCAGGCCAGGAGCTG
 CAGGACCTATCCAGACAGTTACTATGACAGTGGCTGGAGGAGTCTGAGACGCGCTCCAGCAAGTCACTCTCA
 GGGCCTCGACTCGTCCCCCTGGCCCTGCTGAGGATCACTATGAGCGCAACACCCCTGATGGCAGCATGAGGAG
 ATGGAGCACCCGAGAATGACCTTGCCTTTGGCTGATGTGCCATGACAGGCACTATGATCCCGGAGTGCAGT
 GAGTTTGGCCACTCTGACACATGCTGGATGCTTGGCCAGTCACTCCAGCGCCGAGCAAGAGCAGCGCCCTC
 AAATCTTCCACCTTCTGCTGCTTACAGGACGAGGAGGAGGAGGAGCCTGCGGGGCGCGGAGCCCAAGCCCCG
 GAAGACGGGAACCAACAAACGCGCCCGCTGCGCTCTCGCTCGCTTCCAGTGCCTTCTCCACAGTAGCCATGAT
 TCTGCAAGGACTCGGCCACCTTGGAGGAATCCCCCTGACCCAGACCTCGGACTTCCACCCCGGACGCACACCG

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FIGURE 1723B

GCATCTGCCAGACGGCCAAGCGGAGATCTACTGTGAGCCCCCTACTGGCCGGCCGGCCCCCTCCCCAGCC
GCCGCCAGCTCCCAATGGCCCATTCAGGGCCTCACTCTCCACCCCTTCAGCGTGGACTTCCTGGCCAGGGCC
CCAAGTGGGGTATCACTGACCTCATGACCACGCTGGCCCTTCTCCATGCAGGGTCCAGGTCTCTCCCTCAT
TTCATCTCCAGCCCCCAGGGGCCCTTCCCTTTATGGGGCTTCCCCATCTGATGCCCAAGAGGGCTCCTCT
GCAATGACTGGGCTCCTTCCCTTGACTTCCAGGGAGCACCCCTCGATTGGGCAGATGGTGGAGTCAAGGTGG
GCAGCGTACTTCTAACTCATTGTTCCCTCATGGCCGACCAGGGCGGGGATAGCATGCCCAATTTAGCCCTGAA
GCAGGGCTGAAGTGGGGAGCCCTTTCCTGGGAGCTCCAGAGGAACTCTTGACCACCAAGTGGCTCCCTGAAG
GGCTTTTGTTACCAAGGTGGGGTAGGGACGGGGTGGGAGTGGAGCGGAGGCCTTGTTTCCCGTG

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FIGURE 1724

GGAGAGCGCTCTTCTCTTCTGCTCTTCTCGTTCGCGAGATCAGCGGCGGCGGTGACCGGAGTGGGTCCGCAC
CGTCTCCGGCTCCGGGTGCGAACATGCTGACTGATAGCGGAGGCGGCGGCACCTCCCTTTGAGGAGGACCTGGAC
TCTGTGGCTCCGCGATCCGCCCCAGCTGGGGCTCGGAGCCGCCCTCCGCGGGAGGGGTCCGTCTGGGGATCCGC
ACCGTGAGGCTCTTTGGGAGGCGCGGCCAGCGTCGGGAGTCCGCGAGCAGCGCGCGCGCGGCGGCGAGCGGCAGCGGT
ACGGGCGGAGGGGACGCGGCGCTGGATTCAAGTTGGCGGCTGCCGTGCTGAGGACCGGGGGTGGAGTGGTGCC
TCTGGCAGTGACGAGGACGAAGTGTCCGAGGTTGAATCATTTATTTGGACCAAGAAGATCTGGATAAACCAGTG
CTTAAACACATCAGAGATATCTTATCAAGTACTGCAGAAGGAGCAGACTTACGCACTGTGGATCCAGAGACA
CAGGCACGACTAGAAGCATTTGCTAGAAGCAGCAGGAATTGGCAAATTGTCACTGCTGATGGTAAAGCTTTTGCA
GATCCTGAGGTACTCCGGAGACTGACATCCTCAGTTAGTTGTGCACTGGATGAAGCTGCTGCTGCACAGACGG
ATGAAAGCAGAAAACAGCCACAATGCAGGACAAGTGGCACTCGCAGTCTAGCAGAGCTTGTTTCAGATGGGGAT
GTTAATGCTGTTTCGTAATTGCTAGATGAAGGCAGAAGTGTAATGAACATACAGAAGAAGGAGAAAGCCTGCTG
TGTTTGGCTTGTTTCAGCAGGATATTATGAATTAGCACAAAGTATTGCTTGCTATGCATGCTAATGTTGAAGATCGA
GGGAATAAAGGAGACATAACTCCCCTGATGGCAGCTTCCAGTGGAGGTTACTTAGATATTGTAAATTATTACTT
CTTCATGATGCTGATGTCAACTCCCAGTCTGCAACAGGAAACACTGCGCTAACTTATGCATGTGCTGGAGGATTT
GTTGACATTGTTAAAGTGCTCCTTAATGAAGGTGCAAAATATAGAAGATCATAATGAAATGGACATACCTCCCTTA
ATGGAAGCAGCCAGTGCAAGGTGATGTGGAAGTTGCAAGAGTTCTTTAGATCATGGTGCAAGGCATCAACACTCAT
TCTAATGAATTCAAAGAAAGTGCTCTAACAACCTTGCTTGCTACAAAGGCCAATTGGATATGGTTCGCTTTTACTT
GAAGCTGGTGAGATCAAGAGCACAAAAAGATGAGATGCACACTGCCCTTAATGGAGGCTGCATGGATGGACAT
GTAGAGGTGGCACGTTTGCTTTGGATAGTGGTGCTCAAGTGAACATGCCTGCAGATTCATTGAATCTCCATTG
ACGCTAGCTGCCGTGGAGGACATGTTGAATTGGCAGCTCTACTTATTGAAAGGGGAGCAAACTCTTGAAGAAGTT
AATGATGAAGGATACACTCCCTTGATGGAAGCTGCCCGGGAAGGACATGAAGAAATGGTGGCACTACTCTTAGCA
CAAGGAGCAAAATATAAATGCCAGACAGAAGAACTCAAGAACTGCTCTTACTTTGGCTTGCTGGAGGATTT
TCTGAAGTTGCAGACTTTCTTATTAAAGCAGGGGCTGATATAGAAGTGGCTGCTCCACACCTCTGATGGAGGCA
TCTCAGGAGGGACACCTGGAATTGGTTAAATATTGCTGGCTCTTGGCGCTAATGTGCATGCTACACAGCAACA
GGAGACAGCCTTAACCTATGCTTGTGAAAATGGACATACGGATGTTGCAGATGTTTACTTCAAGCAGGGGCT
GATTTAGACAAGCAGGAGGACATGAAGACTATTTTGGAGGGCATAGATCCGCCAAGCATCAGGTGAGGGTGGCC
TTTGTGCTTGTAAAGCTACTACGTAAGAAATAGATGTTGTAGGTAAACAGAACTCTGGATATCTGAATTCCAGCC
AAGAAGTCCAGGACCCCTGCTGGGTGACAAAGGAAATCCTCTCAATTGAAAAAGATTATGAAGTCCCAATAAAA
AGAGATTGTGATTGCTGGTAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1725

MKAENSHNAGQVDTRSLAEACSDGDVNAVRKLLDEGRSVNEHEEGESLLCLACSAGYYELAQVLLAMHANVEDR
GNKGDITPLMAASSGGYLDIVKLLLLHDADVNSQSATGNTALTYACAGGFVDIVKVLLNEGANIEDHNENGHTPL
MEASAGHVEVARVLLDHGAGINTHSNEFKESALTLACYKGHLDMVRFLLEAGADQEHKTDDEMHTALMEACMDGH
VEVARLLLDSGAQVNMPADSFESPLTLAACGGHVELAALLIERGANLEEVNDEGYTPLMEAAAREGHEEMVALLLA
QGANINAQTEETQETALTLACCGGFSEVADFLIKAGADIELGCSTPLMEASQEGHLELVKYLASGANVHATTAT
GDTALTYACENGHTDVADVLLQAGADLDKQEDMKTILEGIDPAKHQVRVAFDACKLLRKE

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FIGURE 1726

GGCACGAGGGCGGGGAAGATGCGCGATGACAAGGATTCTCTGCCTAAGCTTAAGGAOCTGGCATTCTCAAGAAC
CAGCTGGAAAGCCTGCAGCGGCGTGTAGAAGACGAAGTCAACAGTGGAGTGGGCCAGGATGGCTCGCTGTTGTCC
TCCCCGTTCTCTCAAGGATTCCTGGCTGGCTATGTGGTGGCCAACTGAGGGCATCAGCAGATTGGGCTTGGCT
GTGGGACCTGCACCTGGCATCTATGCGGCTCAGGCATATGCTGTGCCAACGTGGGAAGACATTAAAGGACTAT
TTGCAGTTGCTACGCAAGGGGCGGACTAGCTCTAGTGGCCATGGAAGAGGCGAGGATGAGCAGCTCAGCCCTTACG
GTGGAGACACTTTATCTGGATTCCCGAGCTGTCACTCCATTTGCTATCTCCAACTTCTCTGCCACCTTATCCCTTG
CCTCCCTTCTCTCAGATTGTGGACAGTAGTTCCTCAGCCTGCACCCCTGGATTCTCTTCCCCCTTCTAGCTCCA
TGGGACTCGCCCCAAGACTGTGGCTTCAAGSACCACAGCCCCCTTACTCTTCAAGCCCTGACTGTGGAGTTGGTA
GATGCCCTCTGATCCTCAGTATTCTCTCTGGCAATGTTCCAGGGCTTCTCTTCTGGGAGCTGGCTCCATAACTT
GATTTTCCCCAAAGCTGTTGCAATCCCTGTCTGCCCTTAGCCACCCAGGGCTTGTGTGGGTATGAGTGTAGAGG
ATGGGGGTATGCCAGGCTGGGCCGTCCAGGCAGGCCCGCTGGACCCTGATGCTACTCTTATCCACTGCCATGT
ACGGTGCCCATGCCCATTTGCTGGCACTGTGCCATGTGGACGGCCGAGTGCCCTTCCGGCCCTCTCAGCCGTGC
TGCTGACTGAGCTGACCAAGCTACTGTTATGCGCCTTCTCCTTCTGTGGTAGGCTGGCAAGCATGGCCCCAGGGGC
CCCCACCCTGGCGCCAGGCTGCTCCCTTCGCACTATCAGCCCTGCTCTATGGCGCTAAACAACACCTGGTGATCT
ATCTTCAGCGTTACATGGACCCAGCACCTACCAGTGCTGAGTAATCTCAAGATTGGAAGCACAGCTGTGCTCT
ACTGCCCTGTGCTCCGGCACCGCCCTCTGTGCGTCAAGGGTTAGCGCTGCTGCTGCTATGGCTGGGGAGGCT
GCTATGCAGCAGGGGGCCCTCAAGTTCCCGGGAACACCTTCCCAGTCCCCCTCCAGCAGCTGCTGCCAGCCCA
TGCCCCCTGCATATCACTCCGCTAGGCGCTGTGCTCTCATTTCTGACTGCCCTCATCTCAGGCTTGTGCTCAGTGT
ACACAGAGCTGCTCATGAAGCGACAGCGGCTGCCCTGGCACTTCAGAACCTTCTCTCTACACTTTGGTGTGC
TTCTGAATCTAGGTCTGCATGCTGGCGGGCTCTGGCCAGGCCCTCTGGAAGGTTTCTCAGGATGGGCAGCAG
TCGTGGTGTGAGCCAGGCACTAAATGAGTGTCTCATGTCTGCTGCTCATGAAGGATGGCAGCAGCATCACAGCC
TCTTTGGTGTCTGCTGCTCGTGGTGGTCAACGCCGTGCTCTCAGCAGTCTGCTGCTACGGCTGCAGCTCACAGCCG
CCTTCTCTCTGGCCACATTGCTCATTGGCCTGGCCATGCGCTGTACTATGGCAGCCGCTAGTCCCTGACAACCT
CCACCTGATTCLGGACCTGTAGATTGGCGGCCACCAACAGATCCCCCTCCAGGCCCTTCTCCTCTCCCATC
AGCAGCCCTGTAAACAGTGCCCTGTGTAGAAAAGCTGGAGAAGTGAGGGCAGCCAGGTTATCTCTGGAGGTGGT
GGATGAAGGGGTACCCCTAGGAGATGTGAAGTGTGGGTTGGTTAAGGAAATGCTTACCATCCCCACCCCAAC
CAAGTTCTTCCAGACTAAAGAATTAAAGTAACTCAATACCTAGGCCCTGAGAAATAACCCCATCTCTTGTGGGCA
GCTCCCTGCTTTGTCTGATGAACAGAGTTGATGAAGTGGGCTGTGGGCAACAAGTGCTTCTTGTGCTACT
TTAGTCAACCAGCAGAGCCACTGGAGCTGGCTAGTCCAGGCCAGCCATGGTGCATGACTCTTCCATAAGGGATCC
TCACCTTCCACTTTCTATGCAAGAAGGCCAGTGGCCACAGATTATACCACTTACCCAAACCACTCTGACAGT
CTCTCCAGTTCAGCAATGCCTAGAGACATGCTCCCTGCCCTCTCCACAGTGTGCTCTCCCACTAGCCCTTT
GTTCTGGAACACCCAGAGAGGGCTGGCTTGACTCATCTCAGGGAATGTAGCCCTGGGCCCTGGCTTAAGCCGA
CACTCTGACCTCTCTGTTACCCCTGAGGGCTGTCTTGAAGCCCGCTACCCACTCTGAGGCTCCTAGGAGGTACC
ATGCTTCCCACTCTGGGGCTGCCCTGCTAGCAGTCTCCAGCTCCCAAGCCTGGGGAAGCTCTGCACAGA
GTGACCTGAGACCAGGTACAGGAAACCTGTAGCTCAATCAGTGTCTCTTAACTGCATAAGCAATAAGATCTTAA
TAAAGTCTTCTAGGCTGTAGGGTGGTCTCTACACACAGCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1727

MSVEDGGMPGLGRPRQARWTIMLLSTAMYGAHAPLLALCHVDGRVFFRPSSAVLLTELTKLLLCAFSLLVGWQA
WPGGPPWRQAAPFALSALLYGANNLVIYLQRYMDPSTYQVLSNLKIGSTAVLYCLCLRHRLSVRQGLALLLLM
AAGACYAAGGLQVPGNTLPSPPAAAAASPMLHITPLGLLLLILYCLISGLSSVYTELLMKRQLPLALQNLFLY
TFVLLNLGLHAGGGSGPGLLEGFSGWAALVVLSQLNGLLMSAVMKHGSSITRLFVVSCSLVVNAVLAVLLRL
QLTAAFFLATLLIGLAMRLYYGSR

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FIGURE 1728A

CAGAAAGCCATGTCCGACTCGGCGCCACGCGCCAAAGCGCTAACCCGCTGAAAGTTTCTCAGCGAAATCTCAGGG
 ACGATCTGGACCCCGCTGAGAGGAACGTCTTTGAGTGAGATGTTGCCAGAGGCGCTGGAGGAGCGGACTGGTAAG
 CACCGGGAGGGTAGTGGGAGTTTGTCTTCTGCTTGGTGCCTTGAAACAAGGCTTCCAGGCTATTCACTATGAGAT
 CCGGAGGAAAGAGAGAAGGGTTTCGCTGTGGGCAACGTGGTCGCAACCTTTGGTTTGGATCTCGGTAGCCTCTC
 AGCCCGAGGTTTCGGGGTGGTGTCTCGGAGCTAGCCGAAGATTCTTTGAGGTGAACCGGGAGACCGGAGAGATGTT
 TGTGAACGACCGCTGTGGATCGAGGAGGACTGTGTGGGACAGCTGCCCTCTTGCACTGTAACTCTGGAGTTGGTAGT
 GGAGAACCCGCTGGAGCTGTTTACGCGTGGAAAGTGGTAGTCACGAGCATCAACGACAACAACTCTGCTTTCCCTAC
 CCAGGAAATGAAATTTGAGATTAGCGAGGCGGTGGCTCCGGGGACGCGCTTTCCGCTCGAGAGCGCGACGATCC
 CGATGTGGGAAGCAACTCTTTTAAACACTATGAGCTGAGCGGAAATGAATACTTTTGGCTTTCGCTGCGAGACGCG
 GGAGGACAGCACCAGTAGTACCGGAGCTGGTGTGGAGCGCGCCCTGGACCGAGAACCGGAGCCTAGTCTCCAGTT
 AGTGCTGACGGCGTTGGACGGAGGGACCCAGCTCTCTCCGCGAGCCTGCCTATTACATCAAGGTGCTGGACGC
 GAATGACAATGCGCCTGTCTTCAACAGTCTCTTGTACCGGGCGCGCTCTGGAGGATGACACCTCCGGACGCGG
 CGTGGTACAAGTCTTGCACCGGATCGGATGAAGGCCCAACGGTGAATATTTACTCTTTCGGCAGCCACAA
 CCGCGCCGGCTGCGGCAACTATTCCGCTTAGACCTTGTAAACGGGATGCTGACAATCAAGGTCGGCTGGACTT
 CGAGGACACCAACTCCATGAGTATTACATCCAGGCCAAAGACAAGGGCGCCAATCCCGAAGGAGCACAATGCAA
 AGTGTGGTGGAGGTTGTGATGTAAATGACAAACGCGCCGAGATACAGTCACTCCGTGTACAGCCGATACC
 CGAGGATGCCCTCTGGGGACTGTCATCGCTTTGCTCAGTGTGACTGACCTGGATGCTGGCGAGAACGGGCTGGT
 GACCTGCGAAGTTCCACCGGGTCTCCCTTTCAGCCTTACTTCTTCCCTCAAGAATTACTTCACTTTGAAACACAG
 TGCAGACCTGGATCGGAGACTGTGCGAATAACCTCAGCATCACGCCGACGCGGAGCCCGAACCCCTTCCCT
 CTCAGCCCTTACAATAGTGGGTGTCTAAGTGTCCGACATCAATGACAACCCCTCACAATCTCTCAATCTTCTTA
 CGAGCTTACATTGAAGAAAAACCACTCCCGGGGCTCCAATGCTAACTCAAGTGTCTGGGAGCCGACGCGCC
 CGAGAATGCTCGGCTTTCTTTCTTCTCTTGGAGCAAGGAGCTGAAACCGGGCTAGTGGGTGCTATTTTACAAT
 AAATCGTGACATGCGATAGTGTCTATCTTAGTGCCTTAGTACTGAGGATCGCGGGGAATTTGAATTAACAGC
 TCAATATCGGATGGGGGACCCCGGTCTTAGCCACCAACATCAGCGTGAACATATTTGTCACTATGCGCAATGA
 CAATGCCCCCCAGGTCTTATATCTCTGGCCAGGTGGGAGCTCGGTGGAGATGCTGCCCTCGAGGTACCTCAGCTGG
 CCACCTAGTGTACGGGTGGTAGGCTGGGACGCGGATGACGGGCAATGCTCGGCTCTCTCACTCTCTTGGG
 ATCCCCAACCAGAGCCTTTTTTGGCATAGGGCTGCACATGGTCAATCATGACTGCTCCGCTCCAGTCCAAGCAC
 AGATTACCCAGGCGAGCTCTCAGGCTTGTATCAAGACAAATGGGAGCCTTCGCTCTCCACACTGCTACCTCT
 CACTGTGTCAAGTACCGAGGACTCTCCTGAAGCCGAGCGAGTTCCTCTCTGGCTCTGCCCCCGGAGACGAA
 AAAAAATCTCACCTTTTATCTACTCTTCTCTAATCTCGTGTCTGTGGGGTTTGTGGTCAAGTGTTCGAGT
 AATCATATTCAAAGTTTACAAGTGGAAAGCAGTCTAGAGACCTATACCGGACCCCGGTGAGCTCACTGTACCGAAC
 AACAGGGCCCTCTTGCACGCGGACCGGTGCGGGGAGGCGCTGATGTCCGCGCACTTTACATCAGGTGTATTCT
 CACCAAGGACTCCCGCGTACGCGGACCGGCTGCTGAAGAAACCTGGTGCAGCGCACTCACTGGCCAGCCCGCAAA
 CACGCTCGGAGCTGTGATACGGGTGTTCTATAGCGAGGTGTGGGTGACAGAGAGCGCCCTCCCGGACGCAAGC
 CCCGCCAACACGGACTGGCGTTTCTCTAGGCCACAGAGACCGGGCACCGCGCTCCCAAAATGGCGATTGACAC
 CGGCACCTGGCCCAACACAGTTTGAACAGAGATGCTGCAAGCCATGATCTTGGCGTCCCGCAGTGAAGCTGC
 TGTGGAGCTCCACCTCGGTGGGAGGGGTGCGGCAACCATGGGATTGAGGCGCCGCTACGCGCCCACTTCACTCT
 CGACGACGTGCCGACTACCGCCAGAATGTCTACATCCAGGCGCAATGCCACACTGACCAACGCAAGCTGGGAA
 CGGGATGGCAAGCCCGACAGGGTGGCAATGGCAACAGAAGTGGGGCAAGAGAAGTGAACATGGAATCTG
 AGGCCAGGCCAAGACCAAGGCGCGCTCTCCCCAACGAGCCAGCTTCTCTTACCTGCACCCAGGCTCAGA
 GTTTTCAGGGCTAACCCCCAGAATACTGTTAGGGGCCAAGGCCATGCTCCCTTGGGAAACGAAGAAGTGGCCA
 GTACGACCTACCCCTTCCGCCCCAGGGGGTTGAATATGCAAAGCAGATTCCGCTGGGAACCCCACTTCAATCAA
 CTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAAGACTTTGCCACACCCCGTTTGTATGACGT
 GAATCCTCCATCTTCAAAATCAATCAGGCCCATCCCATGCTCCCTCTCCCCACCCCATCCCAAGTT
 CTTCTTCCCGAGTAAGGTGGTTGGGGTGTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGG
 AAGGGCTCATGACCTCTTGGGCTCTCTTTGATTCTCAATCTTCCGCCAAGAGCATGGTTTGGTGGCAGGCCCTT
 CACCTCCTTCCAGAGGCCCAAGATCAATGCTCAAGTTTGGAGGACATGATCACCATCGGATGCTATGATGCTT
 GCTGGATTTAGGAGGGCATTTTGTACCAAGCCTCTTCCCAACGCCCTGGGGACCACTTCTCTGTTTTGTTTTT

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FIGURE 1728B

CATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCACCTCCTCCTCAAACAAGAGACTCCACTGCATGTTT
CAAGACAGTATGGGGTGGTAAGATAAGGAAGGGAAGTGTGTGGATGTGGATGGTGGGGGCATGGACAAAGCTTGA
CACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCTTCAGGGGACTGACAACTCCTCCAGATTCCAGC
CATAAACCAATAACTAGGCTGGACCTTCCCACTACATAATAGGGCTCAGCCCAGGCAGCCAGCTTTGGGCTGAG
CTAACAGGACCAATGGATTAACTGGCATTTCAGTCCAAGGAAGCTCGAAAGCAGGTTTAGGACCAGGTCCCCCTG
AGAGGTCAGAGGGGCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGGAAGGGTCAGCGGAGCCCCAGC
AGGAAGGGTGGCCAGCCAGGCCATTCCTAGTCCCTGGGTGGGGAGGCAGGAGCTAGGGCAGGGACCAATGA
ACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCCTGCCCTCCTGAAGCCTCAGTCCCTCACCTTG
CCAGTGCCGTTTCTCTTCCGTGAAGGCCACTGCCAGGTCCCCAGTGCGCCCCCTAGTGGCCATAGCCTGGTTA
AAGTTCGCCAGTGCTCCTTGTGCATAGACCTTCTCTCCACCCCTTCTGCCCCCTGGGTCGCCGACATCCAG
CGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGAGCGCCCCCTCCTCTTTCGGCTGGGTGAGAAT
AGCCAGTAGTGATAGTGGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGGCGCGGGCTCCGCGCAGCCGTCT
GTCTTGTATCTGCCCGCGCGGCCCGTGTGTGTTTTGTGCTGTGTCACGCGCTAAGGCGACCCCTCCCCCGT
ACTGACTTCTCCTATAAGCGCTTCTCTTCGCATAGTCACGTAGCTCCACCCACCCCTCTCTCTGTGTCTACGC
AAGTTTTATACCTAATATTTATATGGCTTTTTTCTTCGACAAAAAATAATAAAACGTTTCTCTGAAAAGCT
G

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FIGURE 1729

MVPEAWRSGLVSTGRVVGVLALLGALNKASTVIHYEIPEREKGFVGNVAVNLGLDLGSLSARRFRVVSASRR
FFEVRNRETGEMFVNDRDLREELCGTLPSCVTLELVVENPLELFSVEVVIQDINDNNPAFTQEMKLEISEAVAP
GTRFPLESAHDPDVGSNSLQTYELSRNEYFALRVQTRDSTKYAELVLERALDREREPSLQLVLTALDGGTPALS
ASLP IHIKVL DANDNAPVFNQSLYRARVLEDAPS GTRV VQVLATDLDEGPNGEIIYSGSHNRAGVRQLFALDLV
TGMLTIKGRLEDFTKLHEIYIQAQKKGANPEGACHCKVLVEVVDVNDNAPEITVTSVYSPVPEDAPLGTIVIALLS
VTDL DAGENGLVTCEVPGLPFSLTSSLKNYFTLKTSAADLDRETVEYNLSITARDAGTPSLSALTIVRVQVSDI
NDNPPQSSQSSYDVYIEENNLPGAPIILNLVWDPDAPQNA RLSPFLLEQGAETGLVGRYFTINRDNIGIVSSSLVPL
DYEDRREFELTAHISDGGTPVLATNISVNI FVTRNDNAPQVLYPRPGGSSVEMLPRGTISAGHLVSRVVGWDADA
GHNAWLSYSLLGSPNQSLFAIGLHTGQISTARPVQD TDS PRQTLTVL IKDNGEPSLSTTATLTVSVTSDSPEARA
EFPSGSAPREQKNLTFYLLLSLLVSVGFVVTVFGVIIFKVYKWKQSRDLYRAPVSSLYRTPGPSLHADAVRG
LMSPHLYHQVYLTDSRRSDPLLKKPGAASPLASRQNTILRSCDPVFYRQVLGAESAPPGQAPNTDWRFSQAQR
PGTSGSQNGDDTGTWPNNQFDEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYIP
GSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEK

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FIGURE 1730A

ACGCGCCTGAAGCACAAAGCAGATAGCTAGGAAATGAACCATCCCTGGGAGTATGTGGAAACACGGAGGAGCTCT
 GACTTCCCAACTGTCCCACTTCTATGGCGAAGGAAGTCTGCTCTGACTTCAGTGGTTAAGGGCAGAAATTGAAAAATA
 ATTTCTGGAGGAAGATAAGAAATGATCTTCGCGGACTGCACCGGACTACAAAGGGCTTCTCTGCTGGGAATCCT
 CCTGGGAGCTCTGTGGGAGCCGAGGTGACCCAGATACGCTATTTCAGTTCCGGGAAGAGCTGGAGAAAGGCTCTAG
 GGTGGGCGACATCTCCAGGAGCCTGGGGCTGGAGCCCGGGAGCTCGCGGAGCGCGGAGTCCGCATCATCCCCAG
 AGGTAGGACGACAGCTTTTCCGCTGAATCCGCGCAGCGGCAAGTTGGTCACGGCGGCGAGGATAGACCCGGGAGGA
 GCTCTGTATGGGGCCATCAAGTGTCAATTAAATCTAGACATTTCTGATGGAGGATAAAGTGAAATATATGGAGT
 AGAAGTAGAAGTAAGGGACATTAAACGACAATGCGCCTTACTTTCTGTAAGTGAATTAGAAATAAAAATTAGTGA
 AAATGTCAGCCACTGAGATGCGGTTCCCTTACCCACGCGCTGGGATCCGGATATCGGGAAGAACTCTCTGCAGAG
 CTACGAGCTCAGCCGAACTACTTCTCCCTCATCTGTGCAAAATGGAGCCGACGGTAGTAAGTACCCGAAAT
 GGTGCTGAAACGCGCCTTGACCGCGAAGAAAAGGCTGCTCACCCTGCTCTTACGGCTCCGACGGGGCGGA
 CCCGGTGGCACAGGCAACCGCGCGCATCCGCGTGATGGTTCTGATGCGAACGACAACGCACCAGCGTTTGCTCA
 CCGCGAGTACCGCGCAGCGTTCGGGAGAACTTGGCCCTTGGGCACGAGCTGCTTGTAGTCAACGCTACCGACCC
 TGACGAAGGAGTCAATGCGGAAGTGAAGTATTCCTTCGGTATGTGGACGACAAGGCGGCCAAGTTTTCAAACT
 AGATTGTAATTGAGGACAATATCAACAATAGGGAGTTGGACCACGAGGAGTAGGATTACAGAGTGAAGT
 GCAAGCAATGGATAATGCAGGATAATTCTGCGCGAGCCAAGTCTGTATCATCTGTTCTGGACTGACGACAATGC
 CCCAGAAGTGGTCTCACCCTTCTCGCCAGCTCGGTTCCCGAAAACCTCTCCAGAGGGACATTAAATGGCCCTTT
 AAATGTAAATGACCAAGATTCTGAGGAAAACGGACAGGTGATGTTTTCATCCAAGGAAATCTGCGCTTTAAAT
 AGAAAAATCTTACGGAAATTTACTATAGTTTGTAGCAGACATAGTCTTGGATAGGGGAACAGGTTCTGTATCAAA
 CATCAGTGAACCGCACTGACCGGGGAACCCGCCCCATCCACGGAACCTCATATCTCGTGCAAGCTGGCAGA
 CACCAACGACAACCCGCGGCTCTCCCTCAGGCTCCTATTCCGCTTATATCCAGAGAACAATCCAGAGGAGT
 TTCCTCTGCTCTGTGACCCGCCACGACCCCGAGTTGAAGAGAAGCCGACAGTCACTTATTCCTTGGCTGAGAA
 CACCATCAAGGGGCAAGGCTATCGTCTTACGTGTCCATCACTCCGACACTGGGGTACTGTATGCGCTGAGCTC
 CTTGCACTCAGAGCAAGTTCCGAGACTTGCRAAGTGAAGTGTATGGCGGGGACAACGGGACCGCCCCCTCAGCAG
 CAACGTGTCTGTTGAGCCTGTTCTGCTGCGACAGAACGACAATGCGCCGAGATCCTGTACCCCGCCCTCCAC
 GGACGGTTCCACTGGCGTGGAGCTGGCTCCCGCTCCGAGAGCCCGGCTACCTGGTGACCAAGTGGTGGCGGT
 GGACAGAGACTCCGGCCAGAAGCCTGGCTGTCTACCGTCTGCTCAAGGCCAGCAGCGGGGACTCTTCTCGGT
 GGGTCTGCACAGCGGCGAGGTGCGACGGCGGAGCCCTGCTGGACAGAGACGCGCTCAAGCAGAGCTCGTAGT
 GCGCGTCCAGGACAACCGGCCAGCCCCCTCTCTCCGCCACTGTCACTCACCCTGGCGTGCCGACAGCACTCC
 CCAAGTCTCTGGCGGACCTCGGCAGCCTCGAGTCTCCAGCTAACTGAAACCTCAGACCTCACTCTGTACTCGT
 GTAGCGGTGGCCCGCGTCTGCTGCGTCTTCTGGCTTCTGCTATCTGCTGCTGGCGCTCAGGCTGCGCGCGCTG
 GCACAAGTCAAGCTGCTGCTGAGGCTTACGAGGAGCGGCTTGACAGGAGCCGGCTCGCACTTTTGGGGGCTGGA
 CGGGGTGCAAGGCTTTCTGCGAGACTTATCCACAGGTTTCCCTCACCACGAGCTCGCGGAAGAGTCACTGAT
 CTTCCCCAGGCCAATATGCAGACATGCTCGTCAGCAGGAGAGCTTTGAAAGAAAGCAGCCCTTTTGTCTGTC
 AGGTGATTTCGGTATTTTCTAAAGACAGTCATGGGTTAATTGAGCAAGCCCGGCCAACAGGACTGGCGTTTCTC
 TCAGGCCAGAGACCCGGCAACGAGCGCTCCAAAATGGCGATGACACCGGCACCTGGGCCAACACCAAGTTTGA
 CACAGATGCTGCAAGCCATGATCTTGGCGTCCGCGAGTGAAGTGTGTAGTGGAGCTCCACCTTGGAGGGGG
 TGCGCGGACCATGGGATTGAGCGCCGCTACGAGCCCAAGTTCACTTGCAGCAGCTGCCCCGACTACCGCCAGAA
 TGTCTACATCCAGGCAAGTCCCACTGACCAACGCACTGGCAGCTGGCAGCGGATGCGAAGCGCCGACAGGTTGG
 CAATGGCAACAGAAGAGTGGGCAAGAAGGAGAAGTAACATGGAGGCCAGGCGCAAGGCCACAGGGCGGC
 CTCCTCCCAACAGCCAGCTTCTCTTACTGCACCCAGGCTCAGAGTTTCAAGGCTTAACCCCCAGAAATACGT
 GTAGGGGCCAAGGCTATGCTCCCTTGGGAAACAGAAACAAGTGGCCAGTCAGCACTACCCCTTCCCCCAGG
 GGGTTGAATATGCAAAAGCAGTTTCCGCTGGGAACCCCATCCAATCACTGCTGTACCATGGGGTAGTGGGGT
 TACTGTAGACACCAAGAACATTGGCCACACCCGTTAGTTACAGTGAACCTCTCTTCTCCAATCAATCA
 GGCCCATTCATCCATGCTTCTCTCTCTCCCAACCCACTCAACAGTTCCTTTTCCCGAGTAAGGTGGTGGGG
 TGTGTAAGTACCAAGTAACCTACAAGCTCCTAGTTCTGAAAGTTGGAAGGGCATCATGACCTTCTGGGCTCAT
 CTTTGATTCTCAATTTCCCCCAAGCATGGTTTGGTGCCAGCCCTTCACTCTTCCAGCCCAAGGATCACT
 GCTCAAGTTTGGAGGACATGATCACCATCCCATGGTACTGATGCTTGTGGATTAGGAGGGCAATTTTGCTA

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FIGURE 1730B

CCAAGCCTCTTCCCAACGCCCTGGGGACCACTCTTCTGTTTTGTTTTTCATTGTTTGACGTTTCCACTGCATGCC
TTGACTTCCCCACCTCCTCCTCAAAACAAGAGACTCCACTGCAITGTTCCAAGACAGTATGGGGTGGTAAGATAAG
GAAGGGAAGTGTGTGGATGTGGATGGTGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGG
AGGCTCTGTATGTCTCAGGGGACTGACAACTCCTCCAGATTCAGCCATAAACCAATACTAGGCTGGACCCCT
TCCCACTACATAATAGGGCTCAGCCCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACCTGGC
ATTTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCTTGAAGGTCAGAGGGGCTCTGTGGGTGC
TGGGTACTCCAGAGGTGCCACTGGTGAAGGGTCAGCGGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCT
TTAGTCCCCTGGGTTGGGGAGGCAGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCAGSATGGGGC
TTCTTCAACAGGGCCCCCTGCCCTCCTGAAGCCTCAGTCCTTACCTTGCCAGGTGCCGTTTCTCTCCGTGAAGG
CCACTGCCCAGGTCCTCAGTCGCCCTTAGTGGCCATAGCCTGGTTAAAGTTCCCCAGTGCTCCTTGTGCATA
GACCTTCTTCTCCACCCCTTCTGCCCTGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAAGCCAGACCTG
CCCITACAGTAGTGTAGCGCCCCCTCCCTCTTTCGGCTGGTGTAGATAAGCCAGTAGTGTAGTGGGTGTGCTTT
TACGTGATGGCGGGTGGGCAGCGGGCGGGGCTCCGCGCAGCCGCTCTGTCTTGTATCTGCCGCGCGGCCGCT
GTTGTGTTTTGTGCTGTGTCCACGCGCTAAGGCGACCCCTCCCGGTACTGACTTCTCTATAAGCGCTTCTCT
TCGCATAGTCACGTAGCTCCACCCCACTCTTCTGTGTCTCAGCAAGTTTTATACTCTAATATTTATATGG
CTTTTTTCTTCGACAAAAAATAATAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1731

MIPARLHRDYKGLVLLGILLGLTWTGCTQIRYSVP EELEKGSRVGDISRDLGLEPRELAERGVR IIPRGRTQLF
ALNPRSGSLVTAGRIDREELCMGAIKCQLNLDILMEDKVKIYGV EVEVRDINDNAPYFRESELEIKI SENAATEM
RFPLPHAWDPDIGKNSLQSYELSPNTHFSLIVQNGADGSKYPELV LKRALDREEKAAHHLVLTASDGGDPVRTGT
ARIRVMVL DANDNAPAFAPQPEYRASVPENALGTQLLVVNATDPDEGVNAEVRYSF RYVDDKAAQVFKLDCNSGT
ISTIGELDHEESGFYQMEVQAMDNAGYSARAKVLIIVLDVNDNAPEVVLTSLASSVPENSPRGTLIALLN VNDQD
SEENGQVICFIQGNLPFKLEKSYGNYSLVTDIVLDREQVPSYNI TVTATDRGTPPLSTETHI SLNVADTNDNPP
VFPQASY SAYIPENNPRGVSLVSVTAHDPDCEENAQITYS LAENTIQQASLSSYVSINSDTGVLYALSSFDYEQF
RDLQVKVMARDNGHPPLSSNVLSLFLVDQNDNAPEILYPALPTD GSTGVELAPRSAEPGYLVTKVVAVD RDSGQ
NAWLSYRLLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLV VAVQDHGQPPLSATVTLTVAVADS IPQVLADL
GSLESPANSETSDLTILYLVVAVAAVSCVFLAFVILLALRLRRWHKSRL LQASGGGLTGAPASHFVGVDGVQAF L
QTYSHVSLTTDSRKSHLIFPQPNYADMLVSQESFEKSEPLLLSGDSVFSKDSHGLIEQAPPNTDWRFSQAQ RFG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSS TLGGGAGTMGLSARYGPQFTLQHV PDPYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

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FIGURE 1732A

ATGGGGAGCGCGCGGGGAGCTGGGCGGGCTGAGAGGCTGCCAGTGCTCTTTCTCTTCTGCTGCTTTTGTTCTGCGCGGCGCTCTGTGAGCAGATCCGCTACAGGATTCCCGAGGAAATGCCAAGGGCTCCGCTAGTGGGGAAACCTCGCCACGGACCTGGGGTTTCAGCGCTCCAGGAGTTACCGACTCGAAAACCTGCGGCTCAGTTCCGGAAGAGCCTTACTTCAACCGTGAGCGAGAGCGGGGAGTTGCTTGTGAGCAGCAGGCTAGACAGGGAGGAGATATGCGGGAAAGAAGCCCACTTTGTGCTCGGAAATTTGAGGCTGTGCTGAAAATCCACTGAACCTTTATCACGTGAATGTGGAGATCGAGGACATTAATGACCACAGCCAAAATTCACGCAAAATTCCTTTGAGCTGCAAAATAGTGAGCTCTGCACAGCCTGGCACA CGATTTATATTAGGATCTGCCATGATCGGATATTGGTAGCAACACACTGCAGAAATACCAACTCAGTCCCAAGT GATCATTCTCTCACTGATAAATAAGAGAAATCAGATGGCAGTAAATACCTCGAGATGGTATTGAAGACACCTTTG GACAGAGAAAAGCAGAAATCCTACCACTTGACTTTGACTGCTTTGGACTTTGGAGCTCCACCCCTAAGCAGCACT GCACAGATACAGCTTCTAGTGACTGATGCCAATGATAATGCTCCAGTGCTCAGTCAAGACGATACAGGGTGAGC TTTTCAGAAAACGTGTACCCGGGACACAGGTGCTACAGGTGACTGCCACGGACCGGATGAGGGTGCTCAATGCC GAGATTACTTTCTTTTCAGTGAAGCTAGCCAGATCACCCAATTTGACCTGAACCTAAACCCGGGAAATTAATCT GTTTTAAATACATTAGATTTTGAAGAAGTCAAGAATATTCATAGTTTTTGAAGCAAGGGGACGGTGGAGGAATG ATTGCGCAATGCACAGTGGAGGCTAGAAGTCATAGATGAAAATGACACGCCCCAGAGTGATATTCAGTCTCTA CCCAACCTAAATATGGAGGACCGCGAGCTGGGAACACATATTTGCTTGTCTCAAAGTCCGTGCAAGGATTCAGACA CACAATGGAGAAGTGACTTGTAAATTTGAAGGTGATGTTCCATTAAATAATTAACCTTTCAGAAACACGCTAT AAATTAGTGACAGATGCTGTGTTCTAGCCGCGAGCAGAAATCCAGAGTACAAATATAACGTTACGCCAACAGATCGG GGCAGGCGCTCCCTCTCTCCAGTTCCAGCATCACCTGCACATTTGGTGATGTAATGACACGCTCCGGTTTTCT TCACAGTCTTCTATATAGCTACAGTGGCCGGAACAAACCCGCTGGAGCCTCTATTTCACAGAGTCAGGGCTTCT GATCCGGACTTGGGCGCCAAACGCCAAGTCTCTTACTGCATGATGCCACAGTGACCTGGAGCAGCGGGAGCTGTCA TCTCAGTGTCCATAAGCGCGGAGCGGGGTGGTGTTCGCGCAGCGCGCTTCGACCAACGAGCAGTGGCGGCTTCG AACTCACACTGCAGGCCCGGACCAAGGGCTGCCAGCGCTCAGCGCAACGTCGACCTGCGGCTGTAGTG GACGACCGCAACGACAAATGCGCCACGGGTGCTGTACCCCGCGCTGGGTCCGACGGCTCTGCGCTTCTTCGATATG GTGCCGACGCTGCAGAGCCTGGCTACTTTGGTGACCAAGGTAGTGGCGGTGACGACGACTCAGGACACAAAGCC TGCGTGTCTTACCAGTGCTGACAGCTAGCGAGCCCGGGCTCTTCAGCTTGGGGCTGCGCAGCGGGCAAGTGC GCACGCGGTGCCCTAGGCGACAGGAGCGCGTCCGCCAGCGCTTCTGCTGCGCGTGGTGACGCTGGACAGCCA CCACTCTCGGCGACTGCCAGTTGCACTGGTCTTCGCGGACAGCTTGCAGGAGGTGCTGCGCGATATCACTGAC CGCCCCGACCCCTCTGACCTCAGGCTGAGCTGCAAGTTTACCTAGTGGTGGCTTGGCCTTGATCTCAGTGCTCT TCCCTGCTGGCCATGATTCTGGCCATTGGCTTGGCGCTGCGACGCTCCCTGCGGCTCCCTGCGGCTGCGCTTC CAGCGTGGTCTCTGTGTTAAATCCGAATCCGTGGTTCGCCCAACTACAGCGAGGGGACTTTGCCCTATTCTCTAC AATCTATGTGTTGCACATACAGGAAAGACGGAGTTTAAATTTCTCAAAATGTAGTGAGCAGTGTGAGTTCAGGACA GACACTGTTTGGGGTATTCATCTGGGGCTTATTTCCATTTGTAAATGTAGTAAATGAGCTTCCCTCAGCAAA GCCCGCCCAACACGACTGGCGTTTCTCAGGCCACGAGACCCGGCACAGCGGCTCCCAAAATGGCATGAC ACCGGCACCTGGCCCCAACAGCTTTGACACAGAGATGCTGCAAGCACAATGTTTGGCGTCCGCGTGAAGCT GCTGATGGGAGCTCCACCTTGGAGGGGGTGGCGGCACCATGGGATTGAGCGCCGCTACGGAACCCAGTTTCAAC CTGACAGCTGCTGCCACTACGCCAGAAATGCTACATCCAGGACAGCAATGCCACACTGACCAACGAGCTGGC AAGCGGATGCGAAGGCCCGCCAGGTTGGCAAATGGCAACAGAAAGTCCGGGCAAGAGGAGAAAGTAACAT GGAGGGCAGGCCAAGGCCACAGGCGGCCCTCTCCCAACAGCCAGCTTCTCCTTACCTGCACCCAGCCCTCA GAGTTTCAGGGCTAACCCCAAGATACTGTGAGGGGCAAGGCCATGCTCCCTTGGGAAACAGAAACAGTGCC CACTGACACCTACCCCTTCCCCCAGGGGGTTGAAATATGCAAAAGCAGTTCCGCTGGGAACCCCATCCAATC AACTGCTGTACCAATGGGGTAGTGGGGTACTGTAGACACCAAGAACATTTGCCACACCCCGTTAGTTACAG CTGAACCTCTCTCATCTTCCAAATCAATCAGGCCCATCCATCCATGCCTCCCTCCCTCCACCCCATCCACAG TTCTCTTTTCCGAGTAAGGTGGTTGGGGTGTGAAGTACCAAGTAACTACAAGCTCCTAGTTCTGAAAGTT GGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCCAAGCAATGGTTTGGTGCCAGCCCC TTCACTCCTCTTCAGAGGCCAAGATCAATGCTCAAGTTTGGAGGACATGATCACCATCCCATGGTACTGATGC TTGCTGGATTTAGGGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGACCAAGCTCTCTGTTTGT TTCAATTTTGTAGCTTTCCACTGACATGCTTGAATCTCCCACTCTCTCTCAACCAAGAGACTCCATGCAATG TCCAAGACAGTATGGGGTGGTAAGATAAGGAAGGAGTGTGGATGTGGATGTGGGGGATGGACAAAGCTT

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FIGURE 1732B

GACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAGGGGACTGACAACATCCTCCAGATTCCA
GCCATAAACCAATAACTAGGCTGGACCCCTTCCCACTACATAATAGGGCTCAGCCCAGGCAGCCAGCTTTGGGCTG
AGCTAACAGGACCAATGGATTAAACTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCT
TGAGAGGTCAGAGGGGCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGAAGGGTCAGCGGAGCCCCA
GCAGGAAGGTTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTTGGGAGGCAGGGAGCTAGGGCAGGGACCAAT
GAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCCCTCCTGAAGCCTCAGTCCTTCACT
TGCCAGGTGCCGTTTCTCTTCCGTGAAGGCCACTGCCAGGTCCCCAGTGCGCCCCCTAGTGGCCATAGCCTGGT
TAAAGTTCCCCAGTGCCCTCCTTGTCATAGACCTTCTTCTCCACCCCTTCTGCCCTGGGTCCCCGGCCATCC
AGCGGGGTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCCCCTCCCTCTTTCGGCTGGGTGTAGA
ATAGCCAGTAGTGTAGTGCGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGGCGGGCTCCGCGCAGCCGT
CTGTCCITGATCTGCCCGCGCGGCCGTGTGTGTTTTGTGCTGTGTCACGCGCTAAGGCGACCCCTCCCCC
GTACTGACTTCTCCTATAAGCGCTTCTCTTCGATAGTCACGTAGCTCCACCCCACTCTTCTGTGTCTCAC
GCAAGTTTTATACTCTAATATTATATGGCTTTTTTCTTCGACAAAAAATAAAAAAGTTTCTTCTGAAAAG
CTG

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FIGURE 1733

MCSGAGELGRAERLPVLFLLSLFCPALCEQIRYRIPEEMPKGSVVGNLATDLGFSVQELPTRKLRVSSEKPYF
TVSAESGELLVSSRLDREETCGKKPACALEFEAVAENPLNFYHVNVEIEDINDHTPKFTQNSFELQISESAQPGT
RFILGSAHDADIGSNTLQNYQLSPSDHFSLINKEKSDGSKYPEMVLKTPLDREKQKSYHLTLTALDFGAPPLSST
AQITHVLVTDANDNAPVFSQDVYRVLSLSENVYPGTTVLQVTATDQDEGVNAETFSFSEASQITQFDLNSNIGEIT
VLNTLDFEEVKEYSIVLEARDGGGMIAQCTVEVEVIDENDNAPEVIFQSLPNLIMEDAELGTHIALLLKVRDKDSR
HNGEVCTKLEGDVFPFKILTSSRNTYKLVTDVAVLDREQNPEYNIIVTATDRGKPPPLSSSSSITLHIGDVNDNAPVF
SQSSYIVHVAENPPPGASISQVRASDPDLGPNQVSYCYIMASDLEQRELSSYSISAESGVVFAQRAFDEQLRA
FELTLQARDQGSFALSANVSLRVLVDDRNDNAPRVLYPALGPDGSGALFDMVPHAAEPGYLVTKVVAVDADSGHNA
WLSYHVLQASEPGLFSLGLRTGEVRTARALGDRDAVRQRLLVAVRDGGQPPLSATATLHLVFADSLQEVLPDITD
RPDPSDLQAEQLFYLVVALALISVFLVAMILAIALRLRRSSSPASWSCFPGLCVKSESVPPNYSEGLPYSY
NLCVAHTGKTEFNFLKCSEQLSSGQDILCGDSSGALFPLCNSSELTSHQAPPNTDWRF SQAQRPGTSGSQNGDD
TGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQTILQHVPDYRQNVYIPGSNATLTNAAG
KRDGKAPAGNGNKKKSGKKEKK

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FIGURE 1734A

ATGAAGATT CAGAAAAAGCTGACTGGCTGCAGCAGGCTGATGCTTCTGTGCTTCTCTGGAGCTGCTGTGGAA
GCTGGGGCTGGGAATATTCTACTACTCAGTGC CGGAAGAGACAGACAAAGGTTTCCTGCTAGGCAACATCCGCAAG
GACTAGGGCTGCAACCCCAAGGATGGCAGATGGCGAGTCCGATGCTCTCCAGAGGTAGGATGCGCGTTTCT
GCTCTGAATCCTAGAAGTGGCAGCTTGATCACCGCGCGCAGGATAGACCGGGAGGAGCTCTGCGCTCAGAGCATG
CCCTGCTCTGCTGAGTTTAAATATCTCTGTTGAGGATAAAATGAAGCTTTTCTCTGTTGAAGTAGAAATAATTGAT
ATTAATGACAAACACTGCCAATTCAGATTAGAGGAAGTGGAGTTTAAATGAATGAAATAACAGCTCCAGGTATCC
AGAGTCTCATTTGCCCTTTGGGCAAGACCTTGATGTGGGTATGAACCTCACTCCAGAGCTACCAACTCAGCTCTAAC
CCTCATTTCTCCTGGATGTCGAACAGGGAGCCGATGGGCTCAACATCCAGAGATGGTCTGTCGAGAGTCCCTTA
GACAGAGAAGAAGAGCTGTGCCACCTCATCTCACAGCTTCTGATGGGGTGAACAGTCCGTTCCAGGGACC
CTCAGAATTTACATTCAGGTGGTGGATGCAAAATGACAATCTCCAGCATTTACTCAGGCAACAATACCATATAAT
GTCCCGAAAACGTGCGCTGGGTACTCAGCTGCTCATGTTAAATGCCACTGACCCTGATGAGGGAGCCAATGGG
GAAGTAACGTACTCTTTCACAATGTAGACCAGAGTGGCCCAAAATTTTCGTTTAGATTCTTACACAGGAGAA
ATATCAAAATAAAGAACCACTAGATTTTGAAGAATACAAAATGTATCAATGGAAAGTTCAAGCCAGGATGGTGGC
GGGCTCATGGCTAAAGTTAAGGTACTGATCAAAAGTTTGGATGTAATGATAATGCCCGAGAAGTGACCATCACC
TCTGTCAACCTGCGAGTTCGCAAAAATTTCTCTGGGACCAATTTGCTCTTATCAGTGTGCATGACCAAGGAC
TCAGGAGACAATGGCTACCAACCATGTTTCATCTCGAAATTTACCTTTAAATGGAAAGTTAGTTGATAAT
TATTACCGTTTAGTGACTGAAAGAACATGGACAGAGAATTTATCTCTGGGTACAACATCACAATAACAGCAATA
GACCAAGGAATCCAGCTCTATCTACTGAACTCAACTTCTACTACTAGTGACAGATATCAATGACAACTCCCA
GCTTCTCATCAGGACTCTACTCTGCCTACATTTCCGAAAACACCCAGAGAGGCTCCATCTTCTCTGTGAGG
GCCACGAGCTTGGACAGTATGAGAAATGCACAAAATCACTTACTCCCTAATAGAGGACACTATCCAGGGGGCACC
CTATCTGCTTACCTTCCATCAACTCCGACACTGGGCTCCTGTATGCGCTGGGATCTCTGCGATATGAGCAGTT
CGGGACATGCAACTGAAAGTGATGGCGCGGACAGTGGGATCCGCGCTCAGCAGCAACGTGCTCTTACGCTA
TCTCTGCTGGACAGAGCAACGCGCGCCGAGATCCTGTACCCCGCCCTCCCAACAGATGGTTTACCCGCGCTG
GAGCTGGCGCCCTCTCCGACAGAGCCGCTACTGGTGACCAAGGTGGTGGCGGTGGACAGAGACTCGGGCAG
AACGCTGGCTGCTTACCGCTGCTCAAGGCCAGCGAGCGGGACTCTTCTCGGTGGTCTGCACACGGCGCAG
GTGCGCACGGCGGAGCCCTGTGGACAGAGACGCGCTCAAGCAGAGTCTCGTGGTGGCCGCTCAGGACACGGC
CAGCCCCGCTCTCCGCACTGTCAAGCTCACCCTGGCCGTGGCCGACAGGATCTCTGCAATCTTGGCCGACCTG
GGCAGCTCTGAGCCCTCGCCCAACCCAAAGATTCGGACCTCACTCTGTACCTGGTGGTGGCGGCGCCGCGCTG
TCTTGGCTTCTTCTGGCTTCTGCTCATCTGCTGCTGGCGCACAGGCTCGCGCGTGGACCAAGTCAAGCTGTCTA
CAGGCTTGGGAGGCGGCTTAGCGAGCATGCCGGTTCGCACTTTTGGGGCTGGAGCGGGTCTCGGCTTTCTCTG
CAGACCTATTCCACGAGGCTCTCCTCACTGCGGACTCGCGAAGAGCCACTGATTTCCCAAGCCCAATG
GCGGACACACTCATCAGCCAGGAGAGCTGTGAGAAAAAGGTTTCTATCAGCACCCAGTCTTACTTGAAGAC
AAAAAGGAACATTTTCTAGCAAGCCCGCCCAACAGGACTGGGCTTCTCTCAGGCCAGAGACCCGGCAC
AGGGCTCCGAAATGGCGATGCAACCCGACCTGGCCCAACACAGTTGGACAGAGAGATCTGCAAGCCATG
ATCTTGGCTCGCCAGTGAAGCTGCTGATGGGAGCTCCACCCTGGGAGGGGGTGGCGGACCATGGGATTGAGC
GCCGCTACGGACCCAGTTCACCTGCAGCAGTGCCCGACTCCGCGCAAGATGCTCATACCTCCAGGACCAAT
GCCACACTGACCAACGAGCTGCGAAGCGGATGGCAAGGCCAGGCTGGCAATGGCAACAAGAAGTGG
GCGAAGAAGGAGAAAGTATCATGAGGGCCAGGCCAAGAGCCAGGGCGGCTCTCCCAACAGCCAGCTT
CTCTTACCTGACCCAGGCTCAGAGTTTCAGGGCTAACCCAGAAATCTTGGAGGCTCAGGCAAGGCTGCTCC
CCTTGGGAAACAGAAACAGTGCCAGTCAACCTTCCCGCCAGGGGGTTGAATATGCAAAAGCAGT
TCCGCTGGGAAAGCCCATCAATCAACTGCTGTACCATGGGGTAGTGGGGTTACTGTAGACACAAGAACCAT
TTGCCACACCCGTTTAGTTACAGCTGCACTCTCCATCTTCAAAATCAATCAGGCGCTTACATCCCATGCCCTCC
CTCCTCCCAACCCCACTCAACAGATTCTCTTCCCGAGTAAGGTGGTGGGGTGGTGAAGTACCAAGTAACCTA
CAGCGCTCTAGTTTGTGAAAGTTGGAAGGCATCATGACCTTGGCCCTCTCTTTGATTCTCAATCTTCCCCC
AAAGCATGGTTGGTGCCAGCCCTTCACTCTTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGTA
TCACCATCCCATATGATGATGCTGCTGTTAGGGAGGGCTTTTGGTCAAGGCTCTTCCCAAGCCCT
GGGACAGCTCTTCTGTTTGTGTTTTCATTGTTTACGCTTTCACCTGCACTGCTTACTTCCCACTCTCTCT
CAACAAGAGACTCCACTGATGTTCCAAGCAGTATGGGTGGTAAGATAAGGAAGGGAAGTGTGGATGTTG

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FIGURE 1734B

ATGGTGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAGGGG
ACTGACAACATCCTCCAGATTCAGCCATAAACCAATAACTAGGCTGGACCCCTTCCCACTACATAATAGGGCTCA
GCCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACTGGCATTTCAGTCCAAGGAAGCTCGA
AGCAGGTTTAGGACCAGGTCCCTTGAGAGGTCAGAGGGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACT
GGTGGAGGGTCAGCGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTGGGGAGGC
AGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCAGGATGGGGCTTCTTAACAGGGCCCCTGCCC
TCCTGAAGCCTCAGTCTTCACTTGCCAGGTGCGGTTTCTCTCCGTGAAGGCCACTGCCAGGTCCCCAGTGC
GCCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCCAGTGCCTCCTTGTCATAGACCTTCTTCTCCACCCCTT
CTGCCCTGGGTCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCC
CCTCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCGGTGTGCTTTACGTGATGGCGGGTGGGCAGC
GGCGGCGGGGCTCCGCGAGCCGTCTGTCTTGATCTGCCCGCGCGGCCGTGTTGTGTTTTGTGTGTGTGCCA
CGCGCTAAGGCGACCCCTCCCCGCTACTGACTTCTCCTATAAGCGCTTCTCTTCGATAGTCACGTAGCTCCCA
CCCCACCTCTTCTGTGTCTCAGCGAAGTTTTATCTCTAATATTTATATGGCTTTTTTCTTCGACAAAAAA
TAATAAACGTTTTCTCTGAAAAGCTG

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FIGURE 1735

MKIQKKLTGCSRLMLLCLSLLELLLEAGAGNIHYSVPETDKGSFVGNIAKDLGLQPQELADGGVRIVSRGRMPLF
ALNPRSGSLITARRIDREELCAQSMFCLVSFNILVEDKMKLFPVEVEIIDINDNTPQFQLEEFKMEITTPGT
RVSLPFGQOLDVGMNSLQSYQLSSNPHFSLDVQQGADGPOHPENVLQSPLDREEEAVHHLILTASDGGEPVRS
LRIYIQVVDANDNPPAFTQAQYHINVPEVPLGTQLLMVNATDEDEGANGEVTSYFHNVDHVAQIFRLDSYIGE
ISNKEPLDFEYKMYSMEVQAQDGAGLMAKVLIKVLVDVNDNAPEVTITSVTTAVPENFPPTIIALISVHDQD
SGDNGYTCFIPGNLPFKLEKLVNDNYRLVTERTLDORELISGYNIITAIQGTALSTETHISLLVTDINDNSP
VFHQDSYSAYIPENNPRGASIFSVRAHDLSNENAQITYSLIEDTIQGAPLSAYLSINSDTGVLYALRSFDYEQF
RDMQLKVMARDSGDPPFLSSNVLSLFLDQNDNAPEIILYPALPTDGS TGVELAPLSAEPGYLVTKVVAVDSDSQ
NAWLSYRLKASEPGLFSVGLHTGEVVRTARALLDRDALKQSLVAVQDHGQFPPLSATVTLTVAVADRISDILADL
GSLEPSAKPNDSDLTLYLVVAAAASVCVFLAFVIVLLAHLRLRRWHKSRLLQASGGGLASMPGSHFVGVDGVRAFL
QTYSHVSLTADSRKSHLIFPQPNYADTLISQESCEKKGFLSAPQSLLEDKKEPFSQAPPNTDWRFSQAQRPGT
SGSQNGDDTGTWPNQPDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPFTLQHVPDYRQNVYIFGSN
ATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

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FIGURE 1736A

ATGGCCGCTCAAAGGAATCGCTCAAAGGAATCAAAGGATTGCAGCGGGCTGGTCTGCTCTGCCTTTTCTTCGGG
 ATTCATTTGGGAGGCTTGGAGCCCGGCAGATCTCTCTCAATTCTCTGAGGAATTAGAGAAAGGCTCTTTTCGTGGGG
 AACATCTCCAAGGACTTGGGCTCTGGCGCCCGGGAGCTGGCGAGCTGGGAGTCCGCATAGTCTCCAGAGGTAGG
 ACGCAGCTTTTCTCTGTAACCCGCGCAGCGCGGAGCTTGATCACC CGCGGCAGGATAGACCGGGAGGAGCTCTGC
 GCTCAGAGCGCGCGGTGCGTGGTGAGTTTAAATATCTTTGTGGAGACAGGGGTGAACTTTTGGGATAGAAATA
 GAACTACTGATATCAATGCAATGCTCCAAAATTCGAAGCAGAAAATCTAGACGTAAAAAATTAATGAAATGTC
 GCTGCGGGAATGCGTTTTCTCTCCCGGAAGCTATTGATCCGGATGTGGGCGTGAACCTCCCTGCAGAGCTATCAG
 CTCAGCCCCAATAAGCACTTCTCCCTAAGAGTTTCAGAGCCGTGCCAATGGCGTCAAGTACCCGAGCTGGTACTG
 GAGCACTCCCTAGATCGCGAGGAAGAGCCATTACCACCTGTGGTCTCACC GCCTCCGACGGGGGTGACCTCTC
 CGATCTGGCACTGTCTTGTGTCAGTGTGACTGTCTTCGATGCAAAATGACAA CGCGCCCGGTCTTCACCTTGCCAGAA
 TACCGAGTGAGTGTTCTGAGAATTTGCTGTGGGCACTCAGCTGCTGACAGTCACAGCCACCGACAGGGACGAA
 GGTGCCAATGGAGAAAGTGACATATTCATTCCGAAAATTAACCTGACAGCGAATTTGTTGAAGTTCCAACTAAACAAA
 TATACTGGAGAAAATAAAATATCAGAAAATCTAGATTATGAAGAAACCGGTTTCTATGAAATAGAAATACAAGCA
 GAAGATGGAGGACATATCTTGCAACTGCAAAAGTGTGATTACAGTAGAAGATGTAATGACAACAGTCCAGAG
 CTGACCATCAGCTCTCTATTTAGTCCAGTGAAGTATCACCCTGTGGGAACAGCTGTAAGCCCTTTTAAATGTG
 CATGATTTAGACTCTGAGCAGAAATGGACAGSTAACCTGTTCCATTTTGGCGTATCTACCAATTTAAATTAAGAAAG
 TCCATTGACAGTTATTACAGATTTGGTGATACAGAGCCCTTGACAGGGAACAGGTATCTCTTTACATATACACA
 GTGACAGCCACAGATGGGGGAAGTCTCCTCTATCAACGGAAGCTCACTTTATGCTAAGATTGGCAGATATCAAT
 GACAAACCACCTACCTTCTCTCAAGTCTCCTACTTTACCTATATCCAGAGAAACAACGCCAGGGGTGCCCTCCATC
 TTCTCAGTGACAGCGCTGGACCCCGGACAGCAAGAGAAATGCCAGATATTTACTTCCTTGGCTGAAGACACCATC
 CAGGGGGTACCTCTGTGCTCTACATATPCATCAACTCAGACACTGGGCTCCTGTATGCACTCAGATCCTCTGAC
 TATGAGCAGTTTCATGAGCTACAGATGCAGGTGACAGCCAGCGACAGCGGGGATCTCTCACTCAGCAGCAACGTG
 TCGTTGAGCGTTTGTGCTGGACGAGAACGAATGCGCCCGAGATCCTGTACCCCGCCCTCCCCACAGACGGT
 TCCACAGCGCTGGAGCTGGCGCCCCGCTCCGACAGAGCCCGGCTACCTGGTGACCAAGTGGTGGCGGTGGACAGA
 GACTCTCGGCCAGAACCGCTGGCTGTCTTACCGTCTGCTCAAGGCCAGCGAGCCGGGACTCTTCGCGGTGGGGGAG
 CACACGGCGGAGGTGCGCAGCGCGCGAGCCCTGCTGGACAGAGACGCGCTCAAGCAAAGCCTCGTAGTGGCCGTC
 CAGGACCACGGCCAGCCCCCTCTCTCCGCCACTGTACGCTCACC GTGGCGTGGCCGACAGATCCCCCAAGTC
 CTGGCGGACCTTCGGCAGCTTCGAGTCTCCAGCTAACTCTGAAACCTCAGACCTCACTCTGTACCTGGTGGTAGCG
 GTGGCCGCGGTCTCTGCGTCTTCTTGCCCTTGCTCATCGTGCTGACAGCTCAGAGCTGGAGTGGGCGGTGGACAAAG
 TCAAGCTGCTGACAGGCTTCAGGAGCGGGCTTGACAGGTGTGTCGGGCTCGCATCTTTGGGGGCTGGACGGGGTT
 CGGGCTTTCTGACAGACCTATTCCCAAGAGGTCTCTCTCACCGCGGACTCTGACGAAGAGTCACTGATCTCTCCC
 CAGCCCAATTATGCGGCACGCTCATCAGCCAGGAGAGCTGTGAGAAAACGATCCTTTGTCTTTGTTAGATGAT
 TCGAAGTTTCTATAGAGGATACCCCATTTGGTTCCACAAGCCCCGCCAACACGGAAGTGGCGTTTCTCTCAGGCC
 CAGAGATCCCGGCACCAAGCGGCTCCCAAAATGGCGATGACACCGGCACTGGCCCAACCAAGATTGACACAGAG
 ATGCTGCAAGCCATGATCTTGGCGCTCGGCCAGTGAAGCTGCTGATGGGAGTCCACCTGGGAGGGGGTGGCGGC
 ACCATGGATTGAGCGCCCGCTGACCCCAAGCTTCACTCTGACAGCTGCGCCGATCTGCGCAGATCAAGTGTCTAC
 ATCCAGGCAGCAATGGCACACTGACCAACGCACTGGCAAGCGGAGTGGCAAGGCCACAGGCGGCTCTCC
 AACAAAGAAGAGTGGGCGAGAGAGAGAAAGATGAATGAGGCGCAGGCCAGAGGCCACAGGCGGCTCTCCC
 CAACCGCCAGCTTCTCTTCTACCTGCAACCCAGGCTCAGGTTTCAGGGCTCAACCCCAAGATCTGTTAGGGG
 CCAAGGCCATGCTCCCTTGGGAAACAGAAACAAGTGCCCACTCAGCACTTACCCCTCCCCCCAGGGGGTTGA
 ATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGTTACTGTA
 GACCAACAGAAAGTTTGCCACAACCCGTTTAGTTACAGCTGAACCTCTCATCTTCCAAATCAATCAGGCCCAT
 CCATCCCATGCTCCCTCTCTCCCAACCCCACTGCAACAGTTCTCTTTCCCGAGTAAAGTGGTGGGGTGTGAA
 GTACCAAGTAACCTACAAGCTCTCTAGTTCTGAAAGTTGGAAGGGCATCATGACCTCTTGGCTCTCTCTTTGAT
 TCTCAATCTTCCCCAAAGCATGTTTGGTGGCAGCCCTTCACTCTCTTCCAGAGCCCAAGATCAATGCTCAAG
 TTTTGGAGGACATGATCACCATCCCCATGGTACTGATGCTGTGCTGGATTAGGGAGGGCATTTTGTCAACAGCC
 TCTTCCCAAGCCCTGGGAGCAGTCTCTGTTTGTGTTTGTGTTGAGTGTTCACCTGATGATCTTGAATCTT
 CCCCCACCTCTCTCTCAACAAAGAGACTCCATGCTGTTTCAAGACAGTATGGGGTGGTAAGATAAGGAAGGA

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FIGURE 1736B

AGTGTGTGGATGTGGATGGTGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCT
GTAIGTCCICAGGGGACTGACAACATCCTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCCCTTCCCCT
ACATAATAGGGCTCAGCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGSAITAACTGGCATTTTCAG
TCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGAGGGGCCCTCTGTGGGTGCTGGGTAC
TCCAGAGGTGCCACTGGTGAAGGGTCAGCGGAGCCCCAGCAGGAAGGTTGGGCCAGGCAGGCCATTCTTAGTCC
CTGGGTTGGGAGGCAGGAGCTAGGGCAGGGACCAAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCA
ACAGGGCCCCCTGCCCTCCTGAAGCCTCAGTCCITCACCTTGCCAGGTGCCGTTTCTCTTCCGTGAAGGCCACTGC
CCAGGTCCCCAGTGCGCCCTTAGTGGCCATAGCCTGGTTAAAGTTCCCCAGTGCCCTCCTTGTGCATAGACCTTC
TTCTCCACCCCCCTTCTGCCCTTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTAC
AGTAGGTAGCGCCCCCTCCCTCTTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCCGGTGCTTTTACGTGA
TGGCGGGTGGGCAGCGGGCGGCGGGCTCCGCGCAGCCGTCTGTCTTGATCTGCCCGCGGCGGCCGTGTTGTGT
TTTGTGCTGTGTCCACGCGCTAAGGCGACCCCCCTCCCCGTACTGACTTCTCTTATAAGCGCTTCTCTTCGATA
GTCACGTAGCTCCCACCCACCTCTTCTGTGTCTCAGCAAGTTTATACTCTAATATTATATGGCTTTTT
CTTTCGACAAAAAATAATAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1737

MAAQRNRSKESKDCSGLVLLCLFFGIPWEAGARQISYSIPEELEKGSFVGNISKDLGLAPRELAERGVRIVSRGR
TQLFSLNPRSGSLITAGRIDREELCAQSARCVVSFNI LVEDRVKLFGEIEVTDINDNAPKQFAENLDVKINENV
AAGMRFP LPEAIDPDVGNSLQSYQLSPNKHFSLRVQSRANGVKYPELVLEHSLDREEEAIHHLVLTASDGGDPL
RSGTIVLVSVTVFDANDNAPVFTLPEYRVSVPENLPVGTQLLTVIATDRDEGANGEVITYSFRKLPTQLLKFQLNK
YTGEIKISENLDYETGFYEIETQAEDEGGAYLATAKVLITVEDVNDNSPELTIITSLFSPVTEDSPLGTIVVALLNV
HDLDSEQNGQVTCISILAYLPFKLEKSIDSYYRLVIHRLDREQVSSYNITVTATDGGSPPLSTEAHFMLQVADIN
DNPTFSQVSYFTYIPENNARGASIFSVTALDPSKENAQIIYSLAEDTIQGVPLSSYISINSIDIGVLIALRSFD
YEQFHELQMQVTASDSGDPLSSNVLSLFLVDQNDNAP EILYPALPTDGGTGVELAPRSAEPGYLVTKVAVDR
DSGQNAWLSYRLLKASEPGLFAVGEHTGEVTRARALLDRDALKQSLVVAVQDHGQPPLSATVTTLIVAVADSI PQV
LADLGSFESPANSETSDLTLYLVVAVAVSCVFLAFVIVLLAHLRLRRWHKSRLLQASGGGLTGVSGSHFVGVGDV
RAFLQTYSHEVSLTADSRKSHLIFPQPNYADTLISQESCEKNDFLSLLDDSKFFIEDTPLVPQAPPNTDWRFSQA
QRPGTSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGIMGLSARYGPFQFTLQHPD YRQNVY
IPGSNAILTINAAKRGDKAPAGGNGNKKKSGKKEKK

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FIGURE 1738A

AGAATGGGCTCTAGGCGCGCTGCTACCAATCAGGGAATGGGAAGCTGCGCGCCATTGAGTCCCTCCCTCCCC
 GCCTCTACACACAAAGCGGAATGAGATGGATACTCACAGATCCTGACACTGGAGACTTAGAAGTATTTTCCTCT
 GCITTCGTATATATTTTGGATGTAGTCCGCCTAGGACTTCATAGATACATAAGCCGATTACACACCAACCGGCTC
 GAGAAACCGCGGAATATCCGGCTTAGAGCTTGCCTATGCGAATCGGCTACAGCGCGGGAGCCGAGTCCGGTCTGT
 CTCGTCTGTGCTATTTTCTCGGGGACGCTGCGGGGGTTCGGGGCCAGGCAGATCCGATATTCGGTGGCAGAAGAG
 ACCGAAATGGGACTCCTTCGTGGGCAATATCTCAAGGACCTGGGGCTGGAGCCCGGGAGCTGGCGAAGCGCGGA
 GTCGCCATCGCTCCAGAGGGAAGACACAGCTTTTCGCTGTGAATCCGCGAAGCGGAGCTTGATCACCGCAGCG
 AGGATAGACCGGGAGGAGCTCTGTGAGACGGTGTCTCTGTCTTTTAAATATGGAATCTCTCGTGGGAAGACAC
 TTGAAGATTACGCGAGTGGAGGTGGAATAATAGATATTATGATAAAGCCCCAGCTTCCAGGAGGACGAAGTG
 GAGATAAAAGTCAGTGAGCAGCAATTCTGGGGCGCGATTGTCTCTCTTAATGCTAGGGATCCAGATGTGGGG
 GTGAACCTCCCTCCAGAGCTACAGCTCAGCCCTAATAATTACTTTTCCTTGCAACTGCGGGGCAGAACGGATGGG
 GCCAAGAATCCAGAGCTAGTACTGGAGGGAAGCCTGGACCAGAGAAAGAGGCTGTCTACCTGTCTCTCTCACA
 GCTTTAGATGGAGGCGATCCCATCCGAAAGGGCGCAGTTCCTTCTGTGGTGGTCCGATGTAATGATCAC
 ATCCCAATGTTTACACAGCTCCGTATATCGCGTGAGTGTTCAGAAACATCAGCTCCGGAACCTGGGTGCTGATG
 TTTAATGCAACGGCTCCAGACGAGGGAATCAACGGGGGAAGTAATGTATTCTTCGGAACATGGAAAGCAAGGCT
 CTGAAATATTTCCAATTGGAATTCGAAATGGGAAGTTCAAGTACGGGGTCTCTGTGATTTGAAATAATAGA
 TTCTATGAGATGGAATTCAGGGCCAAGATGGTGGAGTCTCTTTACCACCACGAGATGTTGATCACTGTTGTG
 GATGTGAATGATAACGCTCCAGAAATAACTATCACCTCTCTTATTAATTCAAATCTGGAAAACCTCTCTCCAGCT
 ACAGTGATTGCTCTTCTAAATGTCAAGATCAAGATTCTGGAGAAATGGTCAAGTCTCTGTTTATTCTTAATC
 CACCTGCCCTTTAAATAGAAAAGACTTATGAAATATTATCAAAATGATACAAAGCAGAGTGTGGAAGGGAG
 TTGGTCCAGAGCTACAATAACAGTGTGACAGCCAGACGAGGGAAGCCCGCTTTGCTGCAAAATCAATCTGTC
 TGCGTGAATGTGGCAGATGACACGATAACCTCCCGTTTTTCTCACTCCTCTTACTCTGCTACATTTCCCGAA
 AACACCCACAGGGGTGCCCTCATCTTCTCAGTGACCGCCCTCGACCCTGGACAGCAACAGAAATGCCCTGGTCACT
 TACTCTCTGACGGATGACACTGTCCAGGGGGTGCTCTGTCTCTCTATGCTCTCTTAATCTCAACACTGGTGT
 CTCTATGCCCTACAATCCTTCGACTATGAGCAGTTTCGAGACTTAGAACTGAGAGTGATAGCAGCTGACAGCGGG
 GACCCGCCCTCAGCAGCAACGTGTCGTGAGCCTGTTCGTGTCGACCAAGACGACAATGCGCCGAGATCTCTG
 TACCCTGCCCTCCCCACAGACGGCTCACTGGCGTGGAGCTGGCGCCCGCTCTGCGGAACCTGGCTACCTGGTG
 ACCAAGGTGGTTCGGGTGGACAAAGATTACGCCAGAACGCGCTGGCTGTCTATCGCTGCTTAAGGCCAGCGAG
 CCGGACTCTTCGCGGTGGGGGACACACGGGCAGGTGCGTACAGCGCGGCACTGTGGAGACAGACGGCTC
 AAGCAGAGCCTCGTGGTGGCCGCTCCAGGACCACGGCCAGCCCTCTCTCGGCCACCGTCACGCTCACCGTGGCT
 GTGGCCGACAGCATCCCCGAAGTCTGGCGGACCTCGGCAGCTCGAGTCTTGCTAACTCGAACTCAGAC
 CTCTCGCTGACTGGTGGTGGCGGTGGCCGAGCTCTGTCATCTTCTGGTCTTTGTCTATCTGCTGCTGGCA
 CTCAGGCTGTGGCGCTGGCATAACTACGCGCTGCTGCAAGGCTTCTGAAGCGGGGTGGCAGGATAGCCACGTC
 CATTTTGTAGGCGTGGACGGGTGACAGGCTTTCTGCAAACTATTCCAGAGGCTCTCTCATTTGGGACCTG
 CAGAAGAGTACCTGATTTTCCCCAGCCCACTATGGGGACACGCTCATCAGCCAGGAGAGCTGTGAGAAAGC
 GAGCCACTCTTGATAGCTGAAGACTCAGCTATCATTTTAGGCAAAATGTGACCCGACAAGTAATCAGCAAGCCCG
 CCCAACACGGACTGGCGTTTCTCTCAGGCCACAGACCCGCGCAGCTCCCAAAATGGCGATGACACGGG
 ACTGGCCCAACACAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCGAGTGAAGCTGTGAT
 GGGAGCTCCACCTGGCGGGGTCGGCCACCATGGGATTGAGCGCCGCTACGGACCCAGTTCACCTTCGAG
 CAGCTGCCCGACTACCGCCAGAATGTCTACATCCAGGCAGCAATGCCCACTGACCAACGCGCTGGCAAGCGG
 GATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAGAAGTCTGGGCAAGAGGAGAAGTAACTATGGAGG
 CAGGCCAAGAGCCACAGGGCGGCTCTCCCAACAGCCGACTCTCTTACTTCGACCCAGGCTCAGAGTT
 CAGGGCTAACCCCAAGATCTGTTAGGGGCCAAGGCCATGCTCCCTTGGGAAACAGAAACAGTGGCCAGTTC
 GCACCTACCCCTTCCCCCAGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAAGCCCAATCAATCAATGCG
 TGTACCCATGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTGCCACACCCGTTTAGTTACAGCTGAAC
 TCTCTCATCTTCAAATCAATACGCCCATCCATCCATGCCTCCTCTCTCCCAACCCCATCCCAACAGTCTCT
 TTTCCGAGTAAGGTGGTGGGGGTGTTGAAGTACCAAGTAACTCAAGCTCTGATTCTGAAAGTTTGAAGAG
 GCATCATGACCTCTTGCCCTCTCTTTGATTCTCAATCTTCCCCAAAGCATGTTTGGTGGCAGCCCTTCCAC

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FIGURE 1738B

TCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTTGGAGGACATGATCACCATCCCCATGGTACTGATGCTTGCTG
GATTTAGGGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTCTTCTGTTTTGTTTTTCATT
GTTTGACGTTTTCCACTGCATGCCTTGACTTCCCCACCTCCTCCTCAAACAAAGAGACTCCACTGCATGTTCCAAG
ACAGTATGGGGTGGTAAGATAAGGAAGGAAGTGTGGATGTGGATGGTGGGGGCATGGACAAAGCTTGACACA
TCAAGTTATCAAGGCCCTTGGAGGAGGCTCTGTATGTCTCAGGGGACTGACAACATCCTCCAGATTCCAGCCATA
AACCAATAACTAGGCTGGACCTTCCCACTACATAATAGGGCTCAGCCCAGGCAGCCAGCTTTGGGCTGAGCTAA
CAGGACCAATGGATTAAACTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGSACCAGGTCCCCTTGAGAG
GTCAGAGGGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGGAAGGGTCAGCGGAGCCCCAGCAGGA
AGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTGGGGAGGCAGGGAGCTAGGGCAGGGACCAATGAACAG
AAAGTCTCAGCCCCAGGATGGGGCTTCTTCAACAGGGCCCCCTGCCCTCCTGAAGCCTCAGTCTTACCTTGCCAG
GTGCCGTTTTCTCTCCGTGAAGGCCACTGCCAGGTCCCCAGTGCGCCCCCTAGTGGCCATAGCCTGGTTAAAGT
TCCCCAGTGCCCTCTGTGCATAGACCTTCTTCTCCACCCCCCTTCTGCCCCCTGGGTCCCCGGCCATCCAGCGGG
GCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCCCCTCCCTCTTTCGGCTGGGTAGAAATAGCC
AGTAGTGTAGTGCGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGGCGGCGGCTCCGCGCAGCGCTGTGTCC
TTGATCTGCCCGCGCGGCCCTGTGTGTGTTTTGTGCTGTGTCCACGCGCTAAGGCGACCCCCCTCCCCGCTACTG
ACTTCTCCTATAAGCGCTTCTCTTCGCATAGTCACGTAGCTCCCACCCACCCTCTTCTGTGTCTCACGCAAGT
TTTATACTCTAATATTTATATGGCTTTTTTCTTCGACAAAAAATAATAAACGTTTTCTCTGAAAAGCTG

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FIGURE 1739

MANRLRQGRDRSRLLLLCIFLGLTRGFRARQIRYSVPETEKGFSVGNISKDLGLEPRELAKRGVRIVSRGKTQL
FAVNPRSGSLITAGRIDREELCETVSSCFLNMELLVEDTLKIYGEVEIIDINDNAPSFQEDEVEIKVSEHAIPG
ARFALFNARDPDVGVNSLQSYQLSPNNYFSLQLRGRTDGAKNPELVLEGLDREKEAAHLLLLTALDGGDPPIRKG
AVPIRVVVLVDNDHIPMFTQSVYRVSVPENISSGTRVLMVNATDPDEGINEVMSFRNMESKASEIFQLDSQTG
EVQVRGSLDFEKYRFYEMIEQCGDGGGLFTTTMLITVVDVNDNAPEITITSSINSILENSPPGTIVALLNVQDQ
DSGENGVSCFIPNHLFPKLEKTYGNYKLTISRVLDRVLQSYNITLTATDQGSPPLSAETHVWLNVAADDNDNP
PVFPHSSYSAIYPENNPRGASIFSVTALDPPDSKQNALVTYSLTDDTVQGVFLSSYVSINSNTGVLYALQSFDEYQ
FRDLELRVIARDSGDPPLSSNVSLFLVLDQNDNAPEILYPALPTDGSTGVELAPRSAEPGYLVTKVVAVDKDSG
QNAWLSYRLLKASEPGLFAVGEHTGEVTRARALLDRDALKQSLVVAVQDHGQPPLSATVTLTVAVADSIPEVLAD
LGSLESLANSETSDLSLYLVVAVAAVSCIFLVFVIVLLALRLWRWHKSRLQLASEGGLAGMPTSHFVGVDGVQAF
LQYTSHEVSLIADSQKSHLIFFQPNYGDTLISQESCEKSEPLLIAEDSAIILGKCDPTSNQQAPPNTDWRFSQAQ
RPGTSGSQNGDDTGTWPNNQDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYI
PGSNATLTNAAGKRDKAPAGGNGNKKKSGKKEKK

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FIGURE 1740A

AAGGGGGTGGAGGTTTGGCCCTAAAGCTTCAGGACACCAAGAAATTCAGTCGAACAGCCCCACAGTTCTCTCCA
 TAGGGACCTGGGTCCCGTGAAATGCTGGTTATCTCACACCCTGAGGAATAAAGATTGGAATCCGCACCTGGATGCTG
 GAAGTTGACTCGGAGAAAATTTGCGACAGGAGGGAAATGCGCGGCTGTGCAAAAGTTGGCCACTGCAGAAAAGCTGG
 TCCCTGCTGCTTCTTTTGGCGACCTGTGGGAGGCCAGGGCCGGGCAGATTGCTGATTTCTGTGCGGGAGAGAG
 TCGACAGAGGCTCCCTGTGATGGCAACATCGCCAAGGACTTGGGTTTGGAGCCCTTGGCAGCTGGCAGCAGGAGG
 TCCGCATCGTCTCCAGAGGTAGGTCCAGCTCTTTGCTCTGAACCCGCGAAGCGGCAGCTTGGTCACTGCGGAACA
 GGATAGACCGGGAGGAGCTCTGCGCTCAGAGCGCACCTGTCTGTTGAATTTTAACATTTCTGCTGGAGGATAAAAT
 TGACTATTATTACGTAGAGGTGGAAATAACAGATATTAAACGATAATGCCCTCGCTTTGGAGTAGAGGAACCTGG
 AGCTAAAAATCAGTGAAACCACTACGCCAGGATTCCGGATTCTCTTAAGAATCGCATATGATGCAGACGTAGGTG
 AGAACGCCCTTCAGAAGTACGACTCAACCCAAATGACCATTCTCCCTGGACGTGCGAAGGGGAGCTGATGGGA
 ACAAGTACCCAGAACTGGTCTGGAGCGCTCTCTGAGCCGCGAGGAAGAGGCTGTTCAACCCTCGTTCTCGTGG
 CTTCGTATGGGGGTGACCCAGTGCTATCTGGCACCTCCCGCATCTCGCTGAAGGTCTGGATGCGAACGACAATG
 CGCCTGTTTTTACACAGCCGAGTACCCGATAAGCATTCCGGAGAAATACGCTCTGGGGACCCGGATACTACGG
 TGACCGCCACTGACGCAGATGAGGGCTACTACGCTCAAGTGGTATATTTTCTAGAGAAAAGCCCTGGAGAAACCT
 CAGAGGTAATTTGAGCTTAACTCAACATCTGGAGAACTGACAATCAAAAAGATCTAGATTATGAGGATGCTCAT
 TCCATGAAATTTGATTTGAAGCTCAGGATGGTCCGGGCTTCTCACCAGAGCGAAGGTTATCGTCACGGTTCTGG
 ATGTGAATGACAATGCCCAAGATTTTACATGACATCTGCTACTAGCTCAGTTTCTGAAGACTCTCTTCCAGGAA
 CATAAATTTGGGCTTTTAAATGTACATGATAGAGACTCTGGCGAAGCAGATTACACACCTGTCTACTCCCGGAG
 ATCTTCTCTTTAAGTTAGAAAAGTCACTAGACAATACTACCGACTGTTTACAACAGAGCCCTTGACAGGGAAAC
 AGTTTTCCTTTTACAACTACCTCTAACCCTTAAGATGGAGGGAAACCCCTCCCTGTCCACGGATGCTCACATTT
 TGCTCCAGGTGGCAGACATCAACGACAACGACCCGCCCTTCTCCCGACAATCTACTCCACCTACATTTCCGAAA
 ACAACCCAGAGAGGCTCTGTCTCTCTCAGTGACGGCCATGACCCCGACAGCAACGACAAATGCTCATGTAACTT
 ACTCTTTCGCGGAGACACTGTTACGGGGGCACCTTTATCTCTTACATCTCTATCAACTCCGACATCCGAGTAGTAC
 TCTATGCACCTGCGCTCTTTTGATTATGAGCAGTTGCGAGACTTGAAGTGTGGTGATAGCGCGGGACAGCGGGA
 ACCCTCCACTCAGTAGCAATGTATCATTAAAGCTGTTCTGCTGGACAGACGACAAACGCGCCGAGATCCTGT
 ACCCTGCCCTTCCCCACAGACGGTTCCACTGGCTGGAGCTGGCGCCCGCTCCGCGAGAGCCCGGCTACCTGTGGTA
 CCAAGGTGGTGGCGGTGGACAGAGACTCGGGCCAGAACGCCCTGGCTGTTTACCACTGCTCAAGGCCAGCGAGC
 CGGCACTCTCTCGTGGGCTGTGCACACGGGCGAGGTGCGACGGCGGAGCCCTGCTGTCAGACAGAGACGGCTCA
 AGCAGAGCCTCGTGGTGGCCATCCAGGACCACGGCCAGCCCTCTCTCCGCCACTGTACGCTCACCGTGGCCG
 TGGCCGACAGGATCCCCGACATCTTGGCCGACCTGGGCGAGCTCGAGCCCTCCGCGATACCCAAACGATTCCGACC
 TCACCTCTGTACTCGGTGGTGGCGCGCGGTCTCTCGCTCTTCTGGCTCTCTGTCACTCTGTTGTTGCTGGCGC
 ACAGGCTGCGCGCTGTGCACAAGTACGCCCTGCTGCAAGCTTACGAGGCGCATGTGACAGGATGACAGAGCTCGC
 ACTTTGTTGGGCTGGACGGGTTCTGGGCTTTCTGCAAGCTATTCCACAGAGTCTTCCCTACTCGGACTCGC
 GGAAGAGCCACTGATTTTCCCCAGCCCAACTATGCGGACAGGCTCATCAGCCAGGAGAGCTGTGAGAAAAAGG
 ATTTTTATCAGCGCTCAATCTCTACTGAAAGAAAGAGAGAAACGTTTCTCAGCAAGCCCCGCCCAACA
 CGGACTGGCGTTTCTCTCAGGCCAGAGACCGCGCACAGCGCTCCCAAAATGGCGATGACACCGGCACCTGGC
 CCAACAACCAAGTTTGACACAGAGATGCTGAAGCCATGATCTTGGGCTCCGCCAGTGAAGCTGTGATGGAGCT
 CCAACCTGGGAGGGGGTGGCGGCACCATGGGATTGAGCGCCGCTACGGACCCCAAGTTACCTGACGACGCTG
 CGACTACCGCCAGAAATGCTCTAGATCCGAGCAGCAATGCCACATGACACGCACTGGCAAGCGGATGGCA
 AGGCCCCACGAGGTGGAAATGCGCAACAAGAAAGATGGGCAAGAGGAGAAAGTACATGAGGCCAGGCCA
 AGAGCCACAGCGCGCTCTGCCAACACAGCCAGCTTCTCTTACCTGCACACGAGCTCAGAGTTTCAAGGCT
 AACCCCAAGAACTAGTAGGGGCCAAGGCCATGCTCCCTTGGGAACAGAAACAAGTGCCCACTGACACCTA
 CCCCTTCCCCCCAGGGGGTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCATCCAATCACTGCTGTACCC
 ATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTGGCACACCCCGTTTGTAGTACAGCTGAACCTTCCA
 TCTTTCCAAATCAATCAGGCCATCCATCCATGCTCCCTCTCTCCACCCCACTCCAACAGTCTCTCTTCCCG
 AGTAAGGTGGTTGGGGTGTGAAGATACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGGAAAGGCATCAT
 GACCTCTTGGGCTCTCTTTGATTCTCAATCTTCCCCAAAGCATGGTTTGGTGCCAGCCCTTCACTCTCTCC
 AGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGATCACCATCCCCATGGTACTGATGCTTGGTGAATTTAG

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FIGURE 1740B

GGAGGGCATTTTGCTACCAAGCCTCTTCCCAACGCCCTGGGGACCAGTCTTCTGTTTTGTTTTTCATTGTTTGAC
GTTTCCACTGCATGCCTTGACTTCCCCACCTCCTCCTCAACAAGAGACTCCAATGCATGTTCCAAGACAGTAT
GGGGTGTAAGATAAGGAAGGAAGTGTGTGGATGTGGATGGTGGGGCATGGACAAAGCTTGACACATCAAGTT
ATCAAGGCTTGGAGGAGGCTCTGTATGTCCTCAGGGGACTGACAAACATCCTCCAGATTCCAGCCATAAACCAAT
AACTAGGCTGGACCTTCCCACTACATAATAGGGCTCAGCCCAAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACC
AATGGATTAACTGGCATTTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCTTGAGAGGTCAGAG
GGGCCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGGAAGGGTCAGCGGAGCCCCAGCAGGAAGGGTGG
GCCAGCCAGGCCATTCTTAGTCCCTGGGTTGGGGAGGCAGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCT
CAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCCTGCCCTCCTGAAGCCTCAGTCCCTTACCTTGCCAGGTGCCGT
TTCTCTTCCGTGAAGGCCACTGCCAGGTCCCCAGTGCGCCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCCAG
TGCCCTCCTTGTGCATAGACCTTCTTCTCCACCCCCTTCTGCCCTTGGGTCCCGGCCATCCAGCGGGGCTGCCA
GAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCCCCTCCCTCTTTCCGGCTGGTGTAGAATAGCCAGTAGTG
TAGTGCGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGGCGGGGCTCCGCGCAGCCGCTGTGCTTGTATCT
GCCCGCGGGCGCCGTGTGTGTTTTGTGTGTGTGTCCACGCGCTAAGGCGACCCCTCCCCGCTACTGACTTCTC
CTATAAGCGCTTCTCTTCGCATAGTCACGTAGCTCCCACCCCACCTCTTCTGTGTCTCACGCAAGTTTTATAC
TCTAATATTATATGCGTTTTTCTTTCGACAAAAATAATAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1741

MAALQKLPCHRKLVLCLFLATLWEARAGQIRYSVREEIDRGSFVGNIKDLGLEPLALAEQGVRIVSRRGSQLF
ALNPRSGSLVTANRIDREELCAQSAPCLLNPNILLEDKLTIIYSVEVEITDINDNAPRFGEVELELKISSETTTTGP
RIPLKNAHDADVGENALQKYALNPNDFSLDVRRGADGNKYPELVLESLDREEEAVHHLVLVASDGGDPVLSGT
SRICVKVLDANDNAPVFTQPEYRISIPENTLVGTRILTVTATDADEGYAQQVYFLEKSPGETSEVFELKSTSGE
LTIKDLDEYEDATFHEIDIEAQDGPGLLTRAKVIVTVLDVNDNAPEFYMISATSSVSEDSLPGTIIIGLFNVHORD
SGQNAFTTCSLPEDLPFKLEKSDNYRRLVITRALDREQFSFYNIILTAKDGGNPSLSTDAHILLQVADINDNAP
AFSRTISYSTIYPENNPRGASVFSVTAHDFDSNDNAHVITYSFAEDTVQGAPLSSYISINSDTGVLYALRSFDYEQ
RDLQVVIARDSGNPPLSSNVSLSLFVLDQNDNAPEILYPAPFTDGSSTGVELAPRSAEPGYLVTKVAVDRDSGQ
NAWLSYHLLKASEPGLFSVGLHTGEVTRARALLDRDALKQSLVVAIQDHGQPPLSATVTLTIVAVADRIDPILADL
GSLEPSAIPNDSDLTLYLVVAVAVSCVFLAFVIVLLAHLRLRRWHKSRLQASGGSLTGMQSSHVGVGDGVRFL
QTIYSHEVSLIADSRKSHLIFPQPNYADTLISQESCEKKDFLSAPQSLLEEEREETFSQQAPPNTDWRFSQAQRP
TSGSQNGDDTGTWPNNQPDTEMLQAMILASASEAADGSSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYIPGS
NATLTNAAGKRDGKAPAGNGNKKKSGKKEK

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FIGURE 1742A

ATGACCAAT TGCTGAGTTTCCGAAATGGCAGAGACTGGCCCTGCTGTGCGCGCTCCTGGGGACGCTGTGCGAA
 ACAGGATCCGGTGCAGATCCGCTACTCGGTGCTGAGGAGCTAGATAAAGGTTCTCTGTTGGGCAACATCCGCTAAC
 GACCTGGGGCTAGAGCCCGGGGAGCTGGCGGAGCGGAGTCCGCATCTGCTCCAGAGGTAGGACGCAAGCTTTTC
 TCTCTGAATCCGCAAGCGGACGCTTGCTACCGCGGAGAGGATAGACCGGGAGGAGCTCTGCGCTCAGATCCCG
 CTGTGCTCTGGTAAAAATTAACATTCTGTGTTGAGGATAAAATGAAAAATTTTGAAGTAGAAATAGAAATTAAGAT
 ATTATGATAAATGCTCTTAATTTCCCAACAGAGGAATGGAATAAAAAATTTGGTGAACCTAACGGTTCTCTGGAACC
 CGATTTCCAATTAAAACTGCTTTTGAACCAAGATGTAGGCATTAACTCCCTCGCAAACTACAAGCTTAGCCCAAT
 GACTACTTCTCTGCTGTGGAATAGCGTCTCTGAGGGGGCCAAGTATCCAGAGCTGGTCTGGAGCGGGCCCTG
 GACCGTGAGAAAAAGAAATTCACAGCTTGTCTGTTGGCTCTGATGGTGGCGACCCCTGTCCACTCTGGCAAC
 TTGCACATCCAAGTGATAGTCTTGGATGCAAAATGACAACCCACCAATGTTTACTCAGCCTGAGTACCGTGTGAGT
 GTTTGGGAGAACGTGCTGTGGGTACCCGGCTGCTCAGGTGAATGCCACTGACCTGACGAGGGATTCAATGCT
 CAAGTGCTTTATATTCTAGATAAAATGCTTGGGAAATCGTGAGATTTTCCATCTTAACCTAGTGAGTGGAGAA
 GTATCAATATTAAGTCTAGATTATGAGGATGCCATGTTCTATGAATTAATAATTGAAGCACAAGGATGGACCA
 GGTCTTCTTCAAGAGCCAAGATTCTAGTCACGGTCTCGATGTGAATGACAATGCTCCAGAAATTAACAATCAG
 TCTCTCAAGCTCAGTCCCAGGAAGGGCACCGTTGGAAGAGAAATTGCTCTTATCGAGCTGCATGACCCGAGAT
 TCTGGGCAGAAATGGCGAGTTGAAGTTTGTCTGGGAAATCTGCAATTAAGTTGAGAAAAATCAATAGATCAA
 TATTACCGCTTAGTGACGGGCCATCTCCCTGGACCGGAACAAATATCAGAATATAACATTAGTCTGAGAGCCTCA
 GATGGGGGAAGCCCGCACTGTCCACAGAAATCACAATCACCTCGATGTGATGACATCAATGACAACCCACCC
 AATCTCCCTCAATTATCTCTACTCCGCTACATTCCAGAAAAACCCACAGGAGCGCTCCATCTTCTCAGTGACA
 GCCAGGACCCAGATAGCAACAACAACGCCGCATCACTTATGCAITGACCGAGGACACTCTCAGGGGGCGGCC
 CTGTCTCTCTGCTCTATCAACTCCAACACTGGCGTCTTATACGCGCTGAGATCTTTCGACTACGACAAATTT
 AGAGACTTAAGCTACTGGTGACAGCCAGCGACGGGAACCTCCACTCAGCAGCAACGTTGCTGCTGAACCTG
 TTCGTGCTGGACGAGACGACAACGCGCCGAGATCCTGTACCCCGCCCTCCCCACAGACGGTTCACCTGGCGTG
 GAGCTGGCGCTCTGCTCCGACAGCGCCGGCTACCTGGTGACCAAGTGGTGGCGGTGGACAGAGACTCGGGCCAG
 AACGCTTGGCTGTCTACCGCTGCTCAAGGCCAGCGAGCGGGACTCTTCTCGTGGGTGTGCACACGGCGGAG
 GTGGCACGGCGGAGCCCTGCTGGACAGAGACGGCTCAAGCAGAGCCTCGTGGTGGCGCTCCAGGACACGGC
 CAGCCCCCTCTCTCCGCACTGTACGCTCACCGTGGCGTGGCCGACAGGATCCCCACATCTTGGCGAAGCTG
 TGGAGCTCGAGCGCTCCGCAAAACCAACGATTCTGGACCTCACTCTGACCTGGTGGTGGCGGTGGCCGCGCTC
 TCTCGCTCTTCCGGCTTCTGCTATCTGCTGCTGCGCTCAGGCTGCGGCTGCGACAAGTCTGCTGCTGCTG
 CAGGCTTCGGGAGCGGCTTGGCGAGTACGCCCGCTCGCACTTGTGGGCGCGGACGGGGTTGGGGCTTCTCTG
 CAGACCTATTCCCAAGGTTCTCCCTACTGCGGACTCGCGGAAGAGCCACCTGATTTTCCCCAGGCCCAATAT
 CGGACACCGCTCATCAGCCAGGAGAGCTGTGAGAAAGCGAGCCTCTCTGATAACTCAGGATTTACTTGAATAT
 AAAGGAGATTCCAACCTACTTCAAGAGCCCGCCCAACACGGACTGGGCTTCTCTCAGGCCCCAGAGACCCGCG
 ACCAGCGGCTCCAAAATGGCGATACACCGGCACTGGCCCAACAAACAGTTTGACACAGAGATGCTGCAAGCC
 ATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCTGGGAGGGGGTCCCGCACCATGGAATG
 AGCGCCCGCTACGGAACCCAGTTCACTCTGCAGCAGTGGCCGACTACCGCCAGAATGCTACATCTCCAGGACG
 AATGCCACACTGACCAACGAGCTGGCAAGCGGATGGCAAGGCCCAAGCAAGTGGCAATGGCAACAGAAGAAG
 TCGGGCAAGAAGGAGAAGATTAACATGGAGGCCAGGCCAAGAGCCACAGGCGGCTCTCCCCAACACGCCACG
 CTTCCTCTTACCTGCACCCAGGCTCAGAGTTTTCAGGCTCAACCCCAAGAAATCTGTAGGGGCCAAGGCCATGCT
 TCCCTTTGGGAAACAGAAACAGTGGCCAGTCAAGCTTACCTTCCCCCAGGGGGTTGAATATGCAAAAAGC
 AGTTTCGCTGGGAACCCCAATCCAATCACTGCTGTACCAATGGGGTGTAGTGGGGTTACTGTAGACACCAAGAAC
 CATTTGGCACACCCCGTTTGTATTACAGCTGAATCTCCATCTTCAAAATCAATCAGGCGCCATCTCCCACTGCC
 TCCCTCTCTCCACCCCACTCCAACAGTTCTCTTTCCGAGTAAAGTGGTGGGGTGTGAAGTACCAAGTAAAC
 CTACAAGCCTCTAGTTCTGAAAAGTTGGAAGGGCATCACTGACCTTTGGCCTCTCTTTGATTCTCAATCTTC
 CCAAAAGCATGGTTGGTGGCAGCCCTTCACTCTCCAGAGCCCAAGATCAATGCTCAAGTTTGTGAGGACA
 TGATCAACCATCCCAATGGTACTGATGCTGCTGGATTAGGAGGGCAATTTGCTACCAAGACTCTTCCCAAGC
 CTTGGGACCAAGTCTCTGTTTGTGTTTTCATTGTTTTCAGCTTTTCCAGTGAACCTGCTTCCCCCACTCTCT
 CCTCAAAACAGAGACTCCACTGCATGTTCCAAGACAGTATGGGGTGGTAAGATAAGGAAGGAAGTGTGTGGATG

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FIGURE 1742B

TGGATGGTGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAG
GGGACTGACAAATCCTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCCCTCCCACTACATAATAGGGC
TCAGCCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAAACTGGCAITTCAGTCCAAGGAAGCT
CGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTGAGAGGGGCTCTGTGGGTGCTGGGTACTCCAGAGGTGCC
ACTGGTGGAAAGGTCAGCGAGGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTGGGGA
GGCAGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTCAACAGGGCCCCTG
CCCTCCTGAAGCCTCAGTCCCTTACCTTGCCAGGTGCCGTTTCTCTTCGTGAAGGCCACTGCCAGGTCCCCAG
TGCGCCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCAGTGCCTCCTTGTCATAGACCTTCTTCTCCCACCCC
CTTCTGCCCTGGGTCCCCGGCCATCCAGCGGGCTGCCAGAGAAGCCAGACCTGCCCTTACAGTAGTGTAGCG
CCCCCTCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCCTGTGCTTTTACGTGATGGCGGGTGGGC
AGCGGGCGGGGCTCCGCGCAGCCGCTGTCTCTTGATCTGCCCGCGCGGCCGCTGTTGTGTTTTGTGCTGTGT
CCACGCGCTAAGGCGACCCCTCCCCGCTACTGACTTCTCCTATAAGCGCTTCTCTCGCATAGTCACGTAGCTC
CCACCCACCCCTCTTCTGTGTCTCAGCGAAGTTTATACTCTAATATTTATATGGCTTTTTTCTTCGACAAAA
AAATAATAAACGTTTCTTCTGAAAGCTG

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FIGURE 1743

MTNCLSFNRGRGLALLCALLGTLCTGSGQIRYSVSEELDKGSFVGNIANDLGLEPRELAERGVRIVSRGRTQLF
SLNPQSGSLVTAERIDREELCAQIPLCLVKINI LVEDKLIKFEVEIEIKDINDNAPNFP TEELEIKIGELTVPGT
RFP IKTAFDPDVGINS LQNYKLS PNDYFSLAVNSVSEGAKYPELVLERALDREKKEIHQLVLVASDGGDPVHSGN
LHIQVIVL DANDNPPMFTQPEYRVS VWENVPVGT RLLTVNATDPDEGFNAQVSY ILDKMPGKIAE I FHLNSVSGE
VSILKSLDYEDAMFYEIKIEAQDGPGLLSRAKILVTVLDVNDNAPEITITSLTSSVPEEGTVGREIALIDVHDRD
SGQNGQVEVFVLGNLPFKLEKSIDQYYRLVTATSLDREQISEYNISLRASDGGSPPLSTETHITLHVIDINDNPP
TFPHLSYSAIYIPENNPRGASIFSVTAQDPDSNNNARI TYALTEDTLQGA PLSSFFVSINSNTGVLYALRSFDYEQF
RDLKLLVTASDSGNPPLSSNVSLNLFVLDQNDNAPEILYPALP TDGSTGVELAPRSAEPGYLVTKVVAVD RDSGQ
NAWLSYRLKASEPGLFSVGLHTGEVVRTARALLDRDALKQSLVVAVQDHGQFPLSATVTLTVAVADRIPDILADL
GSLEPSAKPNDSDLTLYLVVAVAAVSCVFLAFVIVLLALRLRRWHKSRLQASGGGLASTPGSHFVGADGVRAFL
QTYSHESVSLTADSRKSHLIFQPNYADTLISQESCEKSEPLLITQDLLEMKGDSNLLQQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEK

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FIGURE 1744A

ATGGCGGCGCCTCTGCTGCCCCAGACCACACCCGGCTGCTCCAGATCTGCCTTCTCTGGGGGTTCCTGGTGAA
ATCAGGGCCGACAGATCTCTCTACCTGGTGTTTGGAGGACAGGAAGGCTCAGTGGTGGGGCAACATCGCCAAG
GCTTGGGTTTGGCGCCCGGGAGCTGGCGGAGCGCGGAGTCCGCATCTGCTCCAGAGGTAGGACGCGACCTTTTC
GCCCTGAACCCGCGCAGCGGCACCTTTGGTACCCGCGGTAGGATAGACAGGGAGGAGCTCTGCCAGACATCTCCA
AATCTGTGTGACAAACCTGGAGATTCTTCTAGAAATACAGTGAAGATTTCGGGGTAGAGGTGGAAATATCGAT
GTTAATGATAACCCACCCAGTTTGGGACAGAACAGAGGGGAAATAAAAGTTGCATGAAATGAAATCCTGGGGCA
AGATTTCCTCTTCTCGAAGCTTTTGTATCCGGAATGATGGTGTAAATCCCTGACGGGTTACACGCTCAACTCAAC
GGTTACTTTTCCCTGGACGTCGAAAGTGGGGCCGATGGGATTAAGTACCCAGAGCTGGTCTGGAAACGCGCTCTA
GATCGCGAGGAAGAGGCGGTTCAACACCTCGTTCTCACGGCCTTCGATGGAGGTGACCCGGTTCGCTCTGGCACT
GCCAGGATTCTCATAATCTTGTGGATACCAACGATAATGCTCCCGTGTTCACCTCAGCCCGAGTACCACGTAAGT
GTTCTGTGAGAACGTTCTCTGTAGGCACTCGGCTATCTACCGTAAAGGCCACTGATCCAGATGAAGAGGCCAATGGA
GACGTGACGTATTCTTTCGGGAAAGTAAGAGACAAAATATCACAGCTATTTCAAGTTGAATTCCTGATGGGGAT
ATAACAATATTGGGGGCTTAGATTATGAGGACTCTGGATTCTATGACATAGATGTAGAAAGCCCATGATGGGCT
GGTCTCCGAGCTAAGCAAGGTACTGGTGACAGTTCTGGATGAAATGACAACGCCACCAAGTACAGTTACA
TCTCTCACCGCTCAGCTCAGGAATCTTCTTCCCGGGTACAGTAATGTCACTTTTCAACGTGCATGACAGTGAC
TCAGGAGAAATGGCGTAGTGTACATGTTCTATTCCAGATAATCTGCCATTACACATTGAAAGACCTATGGAAAT
TATTATCGGTTGTGACACACAGAACAATCTGGACAGGGAAGAAGTCTCAGAAATATACATCACTGTAACCTGCCACT
GACCAGGGAACTCTCCCACTGTCTACAGAACTCATATTTCACTGCAAGTATGGACATCAATGACAACCCACC
ACTTTTCCCTCATGCTTCTTACTCTGCTTACATTTCTGAAACACACCCAGAGAGCCCTCCATCTTATCTAGACT
GCTCAAGACCTGTACAGTGGTGACAATGCCGAATCACTTACTCCTTGGCGAAGACACCTTCCAGGGTGCACCT
CTGTCTCTTATGCTTCTCATCATCAATCAACATACAGGGATCTATATGCTCTTTCCTTCGACTATGACGATTT
AGAGACCTGACAGCTGTGATGACAGCCAGTGACAGTGGAGACCTCCACTCAGACGAATGTGTCACTGAGCCT
TTTGTCTGGACGACCAACGACATGTCCTTGAGATCTGTATCCCACTCTTCCCTACTGATGGCTCCACTGGTGTG
GAGCTGGCACCCCGCTTCCGACGATTCGGGCTACCTGGTGACCAAAAGTGGTGGCAGTGGACAGAGACTCAGGTGAG
AATGCCGTGGCTGTCTTACAGCTCTCAAGTCCAGCGAGCCGGGACTATTGCAAGTGGGGCTGCACACAGGCGAG
GTGCGCACCGCACGGGCGCTGTGACAGAGCGGCTCAAGCAGAGGCTTGTAGTGGTCTCGACGAGCCATGGC
CAGCCCCCTCTCTCGGCCACCGTCACTCACTGTGGCTGTGGCCGACAGCATCCAGATGTCTGGCTGACTTG
GGCAGCCTCAAGCCTTCAGCAGCCAGACGACTCGGGCTCACTCTATCTGCTGGTGGCAGTGGCCGCTGCT
TCTCTGGCTTCTTCTGGCTTTGTGACGGTGTGCTAGCATCAAGCTGAGACGCTGGCACAGTCAAGCTCGCTT
CAGCGTGAAGGCAGCAGGTTGGCAGGTGTGCTGCTCGCACTTTGTGGGCGTGAGCGGGGTCTGGGGTTTCTCTG
CAGACCTATTTCCACGAGGTTCTCCCTCACCGCGGACTCGCGGAAGATCACTGATCTTCTCCAACCCAGCTAT
GCAGACAGCGTCAATCAGCGGGAGAGTTGTGAGAAAGCGAGGCTTCTGATAACTCAGGATTACTTGAACA
AAGAGGACCCCTAATCTTACAGCAAGCCCGCCCAACACGCGACTGGCGTTTCTCTCAGGGCCAGAGACCCCGCACC
AGCGGCTCCCAAAATGGCGATGACACGGCAGCTGGCCCAACCAAGTTGACACAGAGATGCTGCAAGCCATG
ATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCTGGGAGGGGTGCGCGGACCATGGGATGGAGC
GCCCGCTACGGACCCCACTACCTGCAAGCAGTGGCCGACTACCGCAGAGTACCGCAGAAATGCTCAATCCGAGGCAAT
GCCACACTGACCAACGCACTGGCAAGCGGATGGCAAGGCCCAAGAGTGGCAATGGCAACGAAGAAGTGG
GGCAAGAGGAGAGAAGTAAATCATGTAGGGCCAGGCCAAGAGCCAGAGGCGGCTCTCCCAACAGGCCCACTGCT
CTCCTTACCTGCCACCCAGGCTCATGAGTTTACGGGCTAACCCAGAAATCTGATAGGGGCCAAGGCTGCTCTC
CCTTGGGAAACAGAAACAAGTGCCAGTCAAGCACTACCCCTTCCCCCAGGGGGTGAATATGCAAAAGCAGT
TCGCTGGGAACCCCACTCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACCAAGAACCAT
TTGGCAACCCCGTTTGTGTACAGTGAACCTCTCCATCTTCCAATCAATCAGGCGCACTCCATCCCATGCTCTC
CTCCTCCCCACCCCACTCAACAGTTCCTCTTTCCGAGTAAGGTGGTGGGGTGTGAGTACCAAGTAACCTGA
CAAGCCTCTAGTTCTGAAAGTGGGAAGGACATGACCTCTTGGCCTCTCCTTTGATTCTCAACTTCCCTCC
AAGACATGGTTTGGTGCCAGCCCTTCACTCTTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGA
TCACCATCCCCATGGTACTGATGCTGCTGGATTAGGGAGGGCAATTTGGTACCAAGCCTCTTCCCAAGCCCT
GGGGACAGTCTCTGTTTGTTTTCAATGTTGGAGCTTCCACTGCAAGCTGACTTCCCCCACTCTCTCT
CAACAAAGAGACTCCACTGCAATGTCCAAGACAGTATGGGGTGGTAAGATAAGGAAGGGAAGTGTGTGATGTGG

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FIGURE 1744B

ATGGTGGGGCATGGACAAAGCTTGACACATCAAGTATCAAGGCCCTTGGAGGAGGCTCTGTATGTCTCAGGGG
ACTGACAACATCCTCCAGATTCCAGCCATAAACCAATACTAGGCTGGACCCCTCCCACTACATAATAGGGCTCA
GCCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACTGGCATTTTCAGTCCAAGGAAGCTCGA
AGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGAGGGGCCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACT
GGTGGAAGGTCAGCGGAGCCCCAGCAGGAAGGTGGGCCAGCCAGGCCATTCTTAGTCCTGGGTTGGGGAGGC
AGGGAGCTAGGGCAGGGACCAAAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTAACAGGGCCCCTGCCC
TCCTGAAGCCTCAGTCCTTCACTTTGCCAGGTGCCGTTTCTCTTCCGTGAAGGCCACTGCCAGGTCGCCAGTGC
GCCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCCAGTGCCTCCTTGTGCATAGACCTTCTTCTCCCACCCCCTT
CTGCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCC
CCTCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCGGTGTGCTTTTACGTGATGGCGGGTGGGCAGC
GGGCGGCGGGCTCCGCGCAGCCGCTGTCTTGTATCTGCCCCGCGCGGCCGCTGTTGTGTTTTGTGCTGTGTCCA
CGCGCTAAGGCGACCCCTCCCCGTACTGACTTCTCTATAAGCGCTTCTCTTCGCATAGTCACGTAGCTCCCA
CCCCACCCTCTTCTGTGTCTCAGCGAAGTTTTATACTCTAATATTTATATGGCTTTTTTCTTCGACAAAAAA
TAATAAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1745

MAAPPARPDPHTRLQLICLLGLVLEIRAEQILYSVFEEQEEGSSVVGNIAKDLGLAPRELAERGVRIVSRGRTQLF
ALNPRSGTLVTAGRIDREELCDRSPNCVTNLEILLEDTVKILRVEVEIIDVNDNPPSFGTEQREIKVAENENPGA
RFPPLPEAFDPDVGVNSLQGYQLNSNGYPSLDVQSGADGIKYPVLVLERALDREEEAVHHLVLTAFDGGDPVRS
ARILIIILVDNTDNAPVFTQPEYHVSVRENVPVGTTRLLTVKATDPDEGANGDVTYSFRKVRDKISQLFQLNSLSGD
ITILGGLDYEDSGFYDIDVEAHGDPGLRARSKVLVTVLDENDNAPEVTITSLTSSVQESSSPGTVIALFNVHDS
SGGNGLVTCSPDNLPFTLEKTYGNYRYRLTHTRLDREEVSEYNIIVTATDQGTPLSTETHISLQVMDINDNPP
TFPHASYSAYIPENNPRGASILSMTAQDPDSDGNARITYSLAEDTFQGAPLSSYVSINSNTGILYALCSFDYEQF
RDLQLLMTASDSGDPPLSSNVLSLFLVDQNDNVPEILYPTFPDGGSTGVELAPRSADSGYLVTKVVAVDRDSGQ
NAWLSYSLKSSSEPLFAVGLHTGEVVRTARALLDRDALKQRLVVVVQDHGQPPLSATVTLTVAVADSIPIVLA
GSLKPSADPDDSGLTLYLVVAVAAVSCVFLAFVTVLLALKLRRWHKSRLHAEGSRLAGVPASHFVGVDGVRFL
QTYSHVSLTADSRKSHLIFSQPSYADTLISRESCEKSEPLLIITQDLETKGDPNLQAPPNTDWRFSQAQRPGT
SGSQNGDDTGTWPNQPDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYIPGSN
ATLTNAAGKRDGKAPAGNGNKKKSGKKEK

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FIGURE 1746A

ATGCGGAGTCCACCTAGGGGCTGGGGCTGCGGAGAGCTGCTGCTGCCCTTCATGCTCTCTGGGACGCTGTGCGAG
CCAGGATCCGGGCGAGATCCCTACTCGATGCCGAGGAGCTGGACAAAGGCTCCTTCGTCCGGCACAATAGCCCAAG
GACCTTGGGCTGGAGCCCCAGGAGCTGGCGGAGCGCGGAGTCCGCATCGTCTCCAGAGGTAGGACGACGCTTTT
GCCCTGAACCCCGGAAGCGGCAGCTTGGTCAACCGGGGAGGATAGACCGGGAGGAGCTCTCGCGCTCAGAGCCCA
CTGTGTGTGGTGAACCTTTAACTACTTGGTTGAGAACAAAATGAAAATTTATGGAGTAGAAGTAGAAATATCGAT
ATTAAATGATAAATCTCCGCGCTTTCGGGATGAAGAGTTAAAGTAAAGTTAATGAAAAATGCGGCTCGAGGGACA
CGGTTAGTGCTTCCCTTCGCGCGGATCGCGATGGGTGTGAACCTCTCCGGAGTTACAGCTCAGCTCCAAT
CTGCACTTCTCTCGATGTGGTAAGCGGAAGTATGGACAAAAGTATCCGGAGCTGGTGTGGAAACAGCCCTA
GACCGCGAAGAGACTGTTACGACCTCTCTCACAGCTTTAGATGGCGGAGACCCGGTACTCTCCGCGACC
ACGCACATCCGTGTTACGGTCTTCAGCAGCAAAAGCAATGCGCCCCGTGTTACCCCATCCGAGTACAGCGTGAGT
GTTCAGAGAACAATCTCTGGGCACTCGGCTGCTATGCTAACCGCCACGGATCCAGATGAGGGAATAAACGGG
AAATTGACCTACTCTTTTCGAATGAAGAAGAAAAAATTCGGAGACTTTCACCTTGATTCCAACCTGGGGGAA
ATCTCACTCTACAATCACTGGACTATGAAGAATCCAGATTCTACCTCATGGAAGTGGTAGCTCAGGATGGAGG
GCTCTTGTGGCCAGCTAAGGTGGTGGTACAGTACAGGACGTGAATGACAATGCCCCCGAAGTGATCTCTACC
TCTCTGACAGTTTCAATCTGAAGACTGCTCTCCCGGAACGTGAATCGCGCTGTGAGGCTACATGTTGGTGAT
TCTGGAAAAATGGTGAGATTGCACTGCTCTATTCTAGGAATTTGCCCTTTAAATTTGAGGAGTCAGTTGATAAAT
TACTATCACTTTAAACAATAGGGACCTGGACAGAGAAGAGACTTCAGATTATAATATCACTTTAACCGTCAATG
GACCATGGAACCCCGCCCCCTCTCTACAGAAAGCCACTCCCTTTGAAAGTAGCAGCGTTAATGACAAACCCACC
AATTTCCCTCAAGCTCTCTCACTCCACCTCTGTACAGAAAAACAATCCAGAGGTTGCTCTCTATCTCTGTGACA
GCCCATGACCCCGACAGCGGCGACAACTGCTCGAGTCACCTACTCCTCGGCTGAAGACACATTTACGGGGCGCCG
TTGCTCTCTATGTATCCATTAACTCTGACACCGGTGCTCTGTATGCTCTGAGACTCTTCGACTATGACAGTTG
AGAGACTACAGTTGTGGGTGACAGCGCAGCGACGAGTGGGAACCTCCACTTAGCAGCAAGCTGTGCTGAGCCTG
TTGTGCTGGACGGAACGACAAATACGCTGAGATCCTGTACCCCGCCCTCCCCACAGACGCTCCACGGGCGTG
GAGCTGGCCCTCTCGCTCCGCAGAACCTGGCTACTGTTGACCAAGGTGGTAGCGGTGGACAAAGATTACGGCCAG
AACGCTGGCTGTCTACCGCTGCTTAAGGCCAGCGAGCCAGGACTCTTTGGCGTTGGGCTGACACGGGCGAG
GTGCGCACAGCGCGAGCCCTGCTGGACAGAGACGCGCTCAAGCAGAGCCTCGTGGTGGCCGTCGAAGACCATGCG
GACGCCCTCTGTGACGCCACTTACCGTACCGTTGCCGTGGCCGACAGGATCCCTGCATCTCTGGTCAAGTCA
GGCATATCAAGACCCCACTTGACCTGAGGATCTGGACCTCAGACTCTATCTTGTGGTGGCAGTGCGTCACTG
TCTTGGCTCTTCTGGCCCTCTGCTCATCTGCTGCTGCTGGTGTGCTCAGACTTAGGGCGTGCGACAAGTCTGCTGCTT
CAGGCTGAAGGCAGCAGGTTGGCGGGTGTGCCCGCTCGCACTTTTGTGGCGCTGGATGGGGTTGGGGCTTTCTCTG
CAGACCTATTCCCAAGGCTCTCCCTCACCGCGGACTCGAGGAAGAGTCACTGATCTTTCCCAAGCCCAACTAC
GACACACGCTCTTAGTGAAGAGAGCTGTGAGAAAAGCGAGCCTCTCTGATGCTGTAAGGTAGATAGCAAC
AAAGAAGAACGGCGGAGTTCAGCAAGCCCCGCCCAACACGGACTGGGCTTTCTCTCAGGCCAGAGACCCGGCAAC
AGCGGCTCCAAAATTGGCATGACACCGGCACTGGCCCAACAACTGTTGACACAGAGATGCTGCAAGCCATG
ATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCTTGGGAGGGGTGCCCGCACCATGGGATTGAGC
GCCCGCTACGGACCCAGTTCACTCTGCAGCAGCTGCCCGACTACCCGAGAAATGCTACATCTCCAGGCAAGCAAT
GCACTGACCAAGCGAGCTGGCAAGCGGATGGCAAGCGCCCGAGAGGTGGCAATGGCAACAGAAAGATCG
GGCAAGAAAGGAAGAAGTAAATATGGAGGCCAGGCCAAGGCCACAGGGCGGCTCTCTCCCAACAGCCGCACTT
CTCTTACCTGACCCAGGCGTCAAGATTACGGGCTAACCCCAAGAACTGTTAGGGGCAAGGCTGCTCTC
CCTTGGGAACAGAAACAACTCGCGAGTCAGACCTTACCCCTTCCCCCGAGGGTTGAATATGCAAAAGCAGT
TCCGCTGGGAACCCCAATCCAATCACTGCTGTACCATGGGGTAGTGGGGTTACTGTAGACACCAAGAGCAAT
TTGCAACACCCCGTTTAGTTACAGTGAACCTCTCTCATCTTCCAAATCAATCAGGCCCATCCATCCAGCTCTC
CTCTCCCCACCCCACTCAACAGTTCTCTTTCCGAGTAAAGTGGTGGGGGTGTTGAAGTACCAAGTAACTCA
CAAGCCTCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCTTTGATTCTCAATCTCCCC
AAAGCATGGTTTGGTGCCAGGCCCTTCACTCTCTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGA
TCACCATCCCCATGGTACTGATGCTTGTGGATTAGGGAGGGCATTTTGTACCAAGAGCTCTCCCAAGCGCCCT
GGGAGCAGTCTTCTGTTTGTGTTTTCATTGTTTGAATTTCCACTTCCACTGCTTACTTCCCCCACTCTCTCT
CAAAACAAGAGACTCCACTGCATGTTCCAAGACAGATATGGGTGGTAAAGTAAGGAAGGAAGTGTGTGGATGTGG

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FIGURE 1746B

ATGTTGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCTCAGGGG
ACTGACAACATCTCCAGATTCCAGCCATAAACCATAACTAGGCTGGACCTTCCCCTACATAATAGGGCTCA
GCCCAGGCAGCCAGCTTTGGCTGAGCTAACAGGACCAATGGATTAACTGGCATTTCAGTCCAAGGAAGCTCGA
AGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTGAGAGGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACT
GGTGGAAAGGTCAGCGGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTGGGGAGGC
AGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCCC
TCCTGAAGCCTCAGTCTTCACTTGCCAGGTGCCGTTTCTCTTCCGTGAAGGCCACTGCCAGGTCCCCAGTGC
GCCCCCTAGTGGCCATAGCCTGGTTAAAGTTCGCCAGTGCCCTCCTTGTCATAGACCTTCTCTCCACCCCTT
CTGCCCTTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCC
CCTCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCAGTGTGCTTTTACGTGATGGCGGGTGGGCAGC
GGGCGCGGGCTCCGCGCAGCCGCTCTGTCTTGATCTGCCGCGCGCGCCGCTGTTGTGTTTTGTCTGTGTCCA
CGCGCTAAGGCAGCCCTCCCCGCTACTGACTTCTCTATAAGCGCTTCTCTTCGCATAGTCAGTAGTCCCCA
CCCCACCTCTTCTGTGTCTCAGCGCAAGTTTTATCTCTAATATTTATATGGCTTTTTTCTTCGACAAAAAA
TAATAAACGTTTCTCTGAAAAGCTG

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FIGURE 1747

MASPPRGWCGCELLLPFMLLGLCEP GSGQIRYSMPPEELDKGSFVGNI AKDLGLEPQELAERGVRIVSRGRTQLF
ALNPRSGSLVTAGRIDREELCAQSP LCVVNFN ILVENKMKIY GVEVEIID INDNFRFRDEELKVKVNENAAAGT
RLVLPFARDADVGVNSLSRSYQLSSNLHFSLDVVS GIDGQKYPELVLEQPLDREKETVHDL LLLTALDGGDPVLSGT
THIRVTVL DANDNAPLFTPSEYSVSVPENIPVGT RLLMLTATDPDEGINGKLTYSFRNEEEKISETFQLDSNLGE
ISTLQSLDYEESRFYLM EVVAQDGGALVASAKVVVTVQDVNDNAPEVILTSLTSSISEDCLPGTVIALF SVHDGD
SGENGEIACSI PRNLFPFKLEKSV DNYHYHLLTTRDL DREETS DYNITLTVMDHGT PPLSTESHIP LKVADVNDNPP
NFPQASYS TSVTENNPRGVSI FSVTAHDPD SGNARVTYSLAEDTFQGA PLSSYVSINS DTVGLYALRSFDYEQ L
RDLQLWVTASDSGNPPLSSNVSLSLFVLDQNDNTPEILYPALPTD GSTGVELAPRSAEPGYLVTKVVAVDKDSGQ
NAWLSYRLLKASEPGLFAVGLHTGEV RTARALLDRDALKQSLVVAVEDHGQ PPLSATFTVTVA VADRI PDILADL
GSIKTPIDPEDLDLTLYLVVAVAAVSCVFLAFVIVLLVLRRLRRWHKSRL LQAEGSRLAGVPASHFVGVDGVRAFL
QTYSHEVSLTADSRKSHLIFQP NYADTL LSEESCEKSEPLLMSDKVDANKEERRVQQA PPNTDWRFSQAQRPGT
SGSQNGDDTGTWPNNQDTEMLQAMILASASEAADGSSITLGGGAGTMGLSARYG PQFTLQHVPDYRQNVYIPGSN
ATLTNAAGKRDKGAPAGGNGNKKKSGKKEK

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FIGURE 1748A

ATGCGCGCTCCGAGAGGCATCCGACGCGACGAGCAGGTCCTGCTCCTCACGCTCCTGGGGACGCTGTGGGGG
GCCCGCGCAGCGAGATCCGCTACTTATCCCGAGGAGCTGGAGAAAGGCTCCTCGTAGGCAACATCGTCAAG
GATCTGGGATCGAGCGCCAGGATTTGGCGGAGCAGGAGTCCGCATCGTCTCCAGAGGTAGGATGCAGCTTTTC
TCTCTGAATCCGCGAAACCGCAGCTTTGGTCACCGCGGGTAGGATAGACCGCGAGGAGCTCTGTGCTCAGAGCCCG
CGGTGCTCGGTGAGTTTAAATCCCTTGTGAGGATAAACTGAACTCTTTATCCCGTGGAAAGTGGAAATAGTGGAC
ATTAATGACAATAACCCCGATTCTTAAAGGAAGAATTGGAAGTGAAAACTCTCGAAAAACGCGAGCTCCATCCTCT
CGTTTTCCACTAATGGAGGCTCTATGACCTGATGTGGGAATGAATCCCTCCTCAGGGATTTAAGCTCAGTGGAAT
AGTCACCTCTCAGTGGACGTGCAAAAGCGAAGCCCATGGGCCCAAGTACCCGGAGCTGGTGCTGGAGGCCACATG
GACCGGGAAGGAGAAAGCCGTTTACCGCTGTGCTCTTACTGCCATGGATGGCGGCGACCCGTGCTCGCTCAAGCGTC
GCCCAAATTCGTGTAACAGTTTCTAGATGTGAATGACAACACTCCAATGTTTACTCAGCCTGTCTACCGTGTAAATG
GTCTCTGAAAACCTGCCAGTAGGCACACCAAGTGTGGCAGTGACTGCCACGACCGAGGATGAAGGAGTCCACGGG
GAAGTAACCTATTCCTTTGTGAAGATTACAGAAAAGATCTCACAATTTTCTGTTTGAATGTTTGTACTGGAGAA
ATTTCAACTTCTGCAAACTAGACTATTAGGAGCTCGAGTTTTTATGAGCTGGGTGTTGAAGCCCGGGATGGGCCA
GGTCTTCGAGACAGAGCGAAAGCTTAATAAATCTATTGGATGTCAATGATAATGTACCAAGAGTGGTTGTTTACA
TCTGGAAGCAGAACTTGTCTGAAGTGCACCTCCAGGAACAGTAATGCCCTTTTCAAGTGTTCGATCGAGAC
TCTGGCCTGAATGGCCTGGTAACCTGTTTCCATCCGGAGAAGTCTCCCAATTTGAATGGAAAAATCAGTTGGCAAT
TATTATCGATTAGTGACAAAATGCAGCTCTAGACCGGGAAGAGGTATTCTTGTAACAACATCACTGTGACAGCCACG
GACAAAGAACACCACTCTGTCTACAGAAACATCATCTCTCTAAATGTGGCAGACCAACAGCAACCGCCGCC
ACCTTCCCCCATTCATCCTCACTCAGTCTATGTGCTTGAAGAACCCCGAGGGTGCTCCATCTCTCTGTGCAAT
GCACCTGGACCTTACGTGGACAGAAACGCCCAAGTCTCCTACTCACTGGCAGAGAACCCCTCAGGGGGCGGCC
CTGTCCTCTACGTGTCATCAACTCCGACATCGGATTTCTGTACGCCCTGCGCTCTCTGACATGAGACGATTG
AGAGCCTACAGCTGTGGGTGACAGCCAGCGACAGCGGGGACCCGCTCTTAGCAGCAACAGTGTCACTGAGCCTG
TTGTGCTGGACAGAAATGACAATGCGCCCGAGATCCTGTACCCCGCCCTCCCCACAGACGGTTCCACTGGCGTG
GAGCTGGCGCCCGCTCCGACAGAGCCCGCTACCTGGTGACCAAGGTGTGGCGGTGGACAGACTCGGGCCAG
AACGCTGGCTGTCTACCGCTGTCTAAGGCCAGCGAGCCAGGACTTTTCTCAGTGGCGCTGCACACGGGCGAG
GTGGCAGCGGCGCGCCCTGTGAGACAGAGACGCGCTCAAGCAGAGCCTAGTGGTGGCGCTCAGGACCAACGGC
CAGCCCCCTCTCCGCCACTGTACGCTCACCGTGGCGCTGGCCGACAGGATCCCGACATCTCTGGCCGACCTG
GGCAGCCTCGAGCGCTCCGCGCAAAACCAACGATTGCGACCTCACTCTGTACTGGTGGTGGCGGTGGCCGCGCTG
TCCTCTGCTTCTTGGCCTTCGTATGCTGTGCTGTGGCGCTCAGACTGCAGCGCTGGCACAAGTCAACGCTGCTG
CAGGCTTCGGAGAGTGGCTTAGCGAGCATGCCGCTCGCACTTTGTGGCGTGGAAAGGGGTTTGGGCTTTCTGTG
CAGACCTATTCCCAGAGGTTCTCACTCACTGCAGACTCGCGTAAGAGTCACTGATTTTCCCCCAGCCCAATAT
GCGCACACGCTTATCAACCAAGGAGCTATGAGAAAAGCAGAGCCTCTCTGATAACTCAGGATTTACTTGAAACG
AAAGGAAGAACCGGCAACTTCAGCAAGCCCCGCCAACACGGAAGTGGCGTTTCTCTCAGGCCCCAGAGAACCGGC
ACCAAGCGCTCCCAAAATGGCGATGACACGGCAGCTGGCCCCAACCAAGCTTTGACACAGAGATGCTGCAAGCC
ATGATCTTGGCGTCCGCCAGTGAAGCTGTGATGGGAGCTCCACCTTGGGAGGGGGTGGCCGACCATGGGATTG
AGGCGCCGCTACGGAACCCAGTTCACCTGCAGCAGCTGCCGACTACCGCCAGAAATGTCTACATCCCGAGCAGC
AATGCCACACTGACCAACGCGAGCTGGCAAGCGGGATGGCAAGCCCCAGCGAATGGCAACGAAGAAGAG
TCGGGCAAGAGGAGAAAGAACTACATGAGGCGAGGCCAAGAGCCACAGGGCGCGCTCTCCCAACACGAGCCAG
CTTCTCCTTACTGCAACCGAGGCTCAGAGTTTACGGGCTAACCCCAAGAACTCTGTAAGGGGCCAAGCTATG
TCCCCTTGGGAAACAGAAAACAGTGCCAGTGCAGCACTACCCCTTCCCCCCCCAGGGGTTGAATATGCAAAAAGC
AGTTTCGCTGGGAACCCCCATCAATCAACTGTCTGATCCCATGGGGTAGTGGGGTTACTGTAGACACCAAGAAGC
CATTTGGCACACCCCGTTTAGTTACAGCTGAACCTCCTCATCTTCCAATCAATCAGGCGCACTCCATCCCATG
TCCTCTCTCCCCACCCATCCAACAGTTCTCTTTCCCGAGTAAGTGGTGGGGGTGTTGAAGTACCAAGTAAC
CTACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATGACCTCTTGGCGCTCTCCTTGTATTCTCAATCTTCC
CCCAAGCATGGTTTGGTGCCAGCCCTTCACTCTCTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACA
TGATCACCATCCCATGTTACTGATGCTTGTGATTAGGGAGGGCAATTTGCTACCAAGCCTCTTCCCAAGC
CCTGGGACAGCTTCTGTTTCTTTTTCATTGTTGACGTTTCCACTGATGAGCTTGACTTCCCCCACTCTCT
CCTCAACAGAGACTCCACTGCATGTTCCAAGACAGTATGGGTGGTAAGATAAGGAAGGGAAGTGTGTGATG

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FIGURE 1748B

TGGATGGTGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAG
GGGACTGACAACATCCTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCCCTTCCCACTACATAATAGGGC
TCAGCCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACTGGCATTTCAGTCCAAGGAAGCT
CGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGAGGGCCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCC
ACTGGTGAAGGGTCAGCGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTTGGGGA
GGCAGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTCAACAGGGCCCCTG
CCCTCCTGAAGCCTCAGTCCTTCACTTGCCAGGTGCCGTTTCTCTCCGTGAAGGCCACTGCCAGGTCCCCAG
TGCGCCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCAGTGCCTCCTTGTGCATAGACCTTCTCTCCACCCC
CTTCTGCCCTTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCG
CCCCCTCCCTCTTTCGGCTGGTGTAGAAATAGCCAGTAGTGTAGTGCGGTGTGCTTTACGTGATGGCGGGTGGGC
AGCGGGCGCGGGCTCCGCGCAGCCGCTCTGTCTTGATCTGCCGCGGGCGGCCGTGTTGTGTTTTGTGCTGTGT
CCACGCGCTAAGCGACCCCCCTCCCCGCTACTGACTTCTCCTATAAGCGCTTCTCTTCGATAGTCACGTAGCTC
CCACCCACCCCTCTTCTGTGTCTACGCAAGTTTATACTCTAATATTTATATGGCTTTTTTCTTCGACAAAA
AAATAATAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1749

MAPPQRHPQRSEQVLLLTLLGTLWGAAAAQIRYSIPEELEKGSFVGNIVKDLGLEPQELAEHGVRIVSRGRMQLF
SLNPRNGSLVTAGRIDREELCAQSPRCLVSFNILVEDKLNLYPVEVEIVDINDNTPRFLKEELEVKILENAAPSS
RFPLMEVYDPPDVGMSLQGFKLSGNSHFSVDVQSEAHGPKYPELVLEGLDREGEAVYRLVLTAMDGGDPVRSSV
AQILVTVLDVNDNTPMFTQPVYRVSVPENLPVGTIPVLAVTATDQDEGVHGEVITYSFVKITEKISQIFCLNVLTGE
ISTSANLDYEDSSFYELGVEARDGPGLADRAKVLITILDVNDNVPEVVVTSGRITIAESAPPGTVIALFQVFD RD
SGLNGLVTCISIPRSLPFELEKSVGNYYRLVTNAALDREEVFLYNITVTATDKGTPLSTETIISLNVADTNDNPP
TFPHSSYSVYVLENNPRGASIFSVNALDPDQNAQVSYSLAEDTLQGAPLSSYVSINSDTGILYALRSFDYEQ
RDLQLWVTASDSDGPPPLSSNVSLSLFVLDQNDNAPEILYPALPTDGSTGVELAPRSAEPGYLVTKVAVDRDSGQ
NAWLSYRLLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVVAVQDHGQPPLSATVILTVAVADRIPDILADL
GSLEPSAKPNDSDLTLYLVAVAAVSCVFLAFVIVLLALRLQRWHKSRLLQASGGGLASMPGSHFVGVEGVRAFL
QTYSHVSLTADSRKSHLIFQPONYADTLINQESYEKSEPLLIITQDLLETKEPRQLQQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGS
NATLTNAAGKRDKAPAGGNNGNKKKSGKKEK

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FIGURE 1750A

ATGCGGGCTCAGCCGAGGGGCGGGGACTACAGAGGATTCTTCCTGCTCTCCATCCTCCTGGGGACCCCCCTGGGAA
 GCCTGGGCGAGGACGTATTCTCTACTCCGTGTGCGAGGAGACGGACAAAGGGTCCCTTGTGGGAGACATCGCCAAAG
 GACCTGGGGCTGGAGCCCGGAGCTGGCGGAGCGCGGAGTCCGCATCATCTCCAGAGGTAGGACGCGAGCTTTTC
 GCCCTGAACCCAGCGCAGCGGCAGCTTGGTCACTGCGGGCAGGATAGACCGGGAAGAGATCTGCGCTCAGAGTGGC
 CGGTGTCTGGTAAACTTTAACTATCCTGATGGAAGATAAAATGAATCCTTTACCCCTATAGACGTGGAAATAATAGAT
 ATTAATGACAAGCTTTCAAAGTCTTCTGACGGAAGAAAATAAATGTAAAAATAATGGAGAATACAGCTCCTGGGTT
 CGGTTTCCGTTAAAGCGAGGCTGGGGATCCAGATGTGGGCACGAACCTCCCTCCAGAGTTACCGAGCTCAGCCCAAT
 CGCCACTTCTCCCTGGCTGTGCAAAAGTGGAGACGATGAAACTAAGTACCCGGGACCTGGTGCTGGAGCGGGTGCTG
 GACCGGGAGGAAGAGCGGGTTCACCACCTGGTCTCTCAGACCTCTGATGGCGGGGACCGCGCCCGATCCAGCACC
 GCCCACAATCCAGGTGACAGTGGTGGATGTGAATGACCACACGCTGTCTTCTCTGCTCAGTACCAAGTAACT
 GTCCCCGAGAATGTGCCAGTGGGTACAAAGACTGCTCAGGTACATGCTATCGACCTGGACGAGGGAGTCAATGGG
 GAAGTGACATATTCTTTTCGAAAAATAACTCTTAAACTTCCAAGATGTTTCATCTGAACTCGCTTACAGAGGAA
 ATATCAACTTTAGAAGGATTAGATTATGAAGAAACTGCCTTCTATGAAATGGAGGTTACGGCTCAAGATGGTCT
 GGTAGTCTGACAAAGGCAAAAGTACTGATCACAGTTTTAGATGTAATGATAATGCTCCAGAAGTGACTATGACG
 TCTTTAAGTAGCTCAATCCCTGAAGACACACCTCTTGGGACAGTCATTGCTCTTTTCTACCTACAAGACAGAGAT
 TCTGGAAGAATGTGTGAGGTGACCTGCACCAATTCAGAAAACCTACCTTTTAAATTAGAAAATACTAATAGATAAT
 TATTATAGATTGGTCACAACCAAAAACCTTGGACGGGAAACACTCTCTTTGTATAACATCACACTGAAAGCCACA
 GATGGTGGAACTCCTCCCTTGTCCAGGGAACACTACATATTCATGCAGGTGGCAGACACAACAGTATAACCCACC
 ACCTTCCCCACTCATCTTACTCAGTCTACATCGCTGAGAACACCCAGAGGGGCTCCATTTCCTTGTAGTACT
 GCACAGGACCACGACAGTGAAGATAATGCCAGATCACTATTCTTGGCCGAAGACACCATCCAGGGGGCTTCA
 GTGTCCTCTATGCTCCATAAACTCTGACACTGGAGTCTGTACGGCGTCAATCTTTGATTATGACGAGTTG
 GAGAACTACAACATAAGAGTACTGACATGACAGCGGGGACCGGCTCTCAGCAGCAACATGTCACTAGAGCTG
 TTCGTGCTGGACAGAGATGACAAACCCGCCGAGATCCTGTACCCGGGCTCCCCACAGATGGTCTACTGGCAT
 GAGCTGGCACCCGCTCCGACAGCCCGGCTACCTGTGTACCAAGGTGGTGGCGGTGGACAAGATTACGGCCAG
 AACGCTGGCTGTCACTCTCTGCTTAAGGCCACGAGGCCAGGACTCTTTGCGGTTGGGCTGTACACGGCGGAG
 GTGCGCACGGCTCGGGCCCTGCTGGACAGAGATGCCCTCAAGCAGAGSCTCGTGGTGGCGCTCAGACACCGGT
 CAGCCTCCTCTGTGACCCACCGTCACTCACCCTGGCTGTGGTGACAGCATCCCCGAAGTCTTGGCCGACCTG
 GGCAGCCTTTGACCCCTCCGACGGTCTTTACAACATATGACCTCAGCTTGATCCTGGTGGTGGCGGTGGCCACAGTC
 TCCTGGCTCTTCTAGCCTTCGTCTCTGTACTGCTGGCGCTCAGGCTCGGGCTGGCACAAGTCAACGCTCTGCT
 CAGGCTTCAGAAGGTGGCTTGGCGAAGTGCACCACTCGCACTTTGTGGGATGGACGGGTGACAGCTTTCTCTG
 CAGACTATTCCCATGAGGTTCTCCCTCACCGGGACTCTCGGAAGAGTCACTGATCTTCCCCAGCCAATAT
 GTAGACATGCTCATCAGCCAGAGAGCTGTGAGAAAATGATTTCTGCAACATCCGATAGATTTCAGGAATGT
 AAAGAAAACTGCCAAGTATTGACGAAGCCCGGCCAACACGCGACTGGCGTTCTCTCAGGCCACAGAGACCGGG
 ACCAGCGGCTCCAAAATGGCATGACACGGCACTTGGCCCAACCACTGCTTGCACAGAGATGCTGCAAGCC
 ATGATCTTGGCTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCTGGGAGGGGTGCCGGCACCATTGGGATTG
 AGCGCCCGCTACGGACCCGAGTTACCTCTGCAGCAGTGGCCGACTACCGCCAGAATGTCTACATCCAGGCCAG
 AATGCCACTGACCAACGCAAGCTGGCAAGCGGGATGGCAAGGCCGCAAGTGGCAATGGCAACAGAAGAAG
 TCGGGCAAGAGGAGAAAGATACATGAGGCCAGGCCAAGAGCCACAGGGCGGCTCTCCCCAACACGCCAG
 CTTCCTCTTACCTGCACCCAGGCTCAGAGTTTCAGGGCTAACCCCAAGATATGTTGAGGGGCAAGGCCATGC
 TCCCTTTGGGAAACAGAAAACAGTGTGCCAGTGCAGCACTACCCCTTCCCCCCCCAGGGGTTGAATATGCAAAAGC
 AGTTCCGCTGGGAACCCCATCAATCAACTGCTGATCCATGGGGTAGTGGGGTTACTGTAGACACCAAGAAC
 CATTTGGCACAACCCGTTTGTATTACAGCTGAACCTCTCCATCTTCCAATCAATCAGGCCCATCCATCCCATGCC
 TCCTCCTCCCCACCCCATCCAACAGTTCTCTTCTCCGAGTAAGGTGTTGGGGTGTGAAGTACCAAGTAAAC
 CTCAAAGCCTCCTAGTTGTAAAGTGTGAAGGGCATCATGACCTCTTGGGCTCTCCTTTGATTCTCAATCTTCC
 CCAAAAGATGGTTTGTGTGCCAGCCCTTCACTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACA
 TGATACCAATCCCATGGTACTGATGCTGCTGGATTTAGGGAGGGCATTTGCTACCAAGCCTCTTCCCAACGC
 CCTGGGACAGCTCTCTGTTTGTGTTTTCATTGTTGACGTTTCCACTGATGGCTTGACTTCCCCCACTCTCT
 CCTCAAACAGAGACTCCACTGCATGTTCCAAGACAGTATGGGTGGTAAGATAAGGAAGGGAAGTGTGTGGATG

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FIGURE 1750B

TGGATGGTGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCTCTCAG
GGGACTGACAACATCCTCCAGATTCAGCCATAAACCAATAACTAGGCTGGACCCCTTCCCACTACATAATAGGGC
TCAGCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACTGGCATTTCAGTCCAAGGAAGCT
CGAAGCAGGTTTAGGACCAGGTCCCTTTGAGAGGTCAGAGGGCCCTCTGTGGTGCTGGGTACTCCAGAGGTGCC
ACTGGTGAAGGGTCAGCGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTITGGGA
GGCAGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTCAACAGGGCCCCTG
.CCCTCTGAAGCCTCAGTCTTACCTTGCCAGGTGCCGTTTCTCTCCGTGAAGGCCACTGCCCAGGTCCCCAG
TGCGCCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCCAGTGCCTCCTTGTGCATAGACCTTCTTCTCCACCCC
CTTCTGCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCG
CCCCCTCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCGGTGTGCTTTTACGTGATGGCGGGTGGGC
AGCGGGCGCGGGCTCCGCGCAGCCGCTCTGTCTTGATCTGCCGCGCGCGCCGCTGTGTGTTTTGTGCTGTGT
CCACGCGCTAAGGCGACCCCCCTCCCCGTA CTGACTTCTCTATAAGCGCTTCTCTTCGCATAGTCACGTAGCTC
CCACCCCACCTCTTCTGTGTCTCAGCAAGTTTATACTCTAATATTTATATGGCTTTTTTCTTCGACAAAA
AAATAATAAACGTTTCTTCTGAAAGCTG

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FIGURE 1751

MAAQPRGGDYRGFFLLSILLGTPWEAWAGRILYSVSEETDKGSFVGDIAKDLGLEPRELAERGVRIISRGRTQLF
ALNQSRGSLVTAGRIDREEICAQSARCLVNFNILMEDKMNLYPIDVEIIDINDNVPRFLTEENVKIMENTAPGV
RFPPLSEAGDPDVGTNSLQSYQLSPNRHFS LAVQSGDDETKYPELVLERVLDREERVHHLVLTASDGGDPPRSST
AHIQVTVVDVNDHTPVFSLPQYQVTPVENVPVGTRLTLVHAIDLDEGVNGEVITYSFRKITPKLPKMFHLNSLTGE
ISTLEGLDYEETA FYEMEVQAQDGGPSLTAKAVLITVLDVNDNAPEVTMTSLSSSIPEDTPLGTVIALFYLDQRD
SGKNGEVICTIPENLPFKLEKSIDNYRLVTTKNLDRETLSLYNITLKATDGGTTPLSRETHIFMQVADINDNPP
TFPHSSSVYIAENNPRGASIFLVTAQDHDSEDNAQITYSLAEDTIQGAPVSSYVSINSDTGVLYALQSFDEQL
RELQLRVTAHDSGDPPLSSNMSLSLFVLDQNDNPP EILYPALP TDGSTGMELAPRSAEPGYLVTKVAVDKDSGQ
NAWLSYLLLKASEPGLFAVGLYTGEVVRTARALLDRDALKQSLVVAQDHHGQPPLSATVTLTVAVADS IPEVLADL
GSLEPSDGPYNYDLTLYLVVAVATVSCVFLAFVLVLLALRLRRWHKSRLQASEGGLANVPTSHFVGMGQVQAF
QTYSHVSLTADSRKSHLIFPQPNYVDMLISQESCEKNDSLTSVDFQECKENLP SIQQAPPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEK

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FIGURE 1752A

ATGGCA GCTCQAACCAATGCCAGCTCCGCGAAGATTAGTCCTGCTATGCTCGCTCCTGGGGATGCTATGGGAG
 GCCAGGGCCAGTCAGATTGCTCTACTCAGTGCTGAAGAGACAGAAAGGGGCTATATTGTGGGCAACATCTCCAAG
 GACTTGCTCTGGAGGCCCGGGAGCTGGCGGAGCGCCAGTCGCGCATGCTCTCTAGAGTTGAGGACGCAGGCTTTTC
 TCTCTGAACCCGCGCAGCGCCACCTTGGTCAACCGGGTAGGATAGACCGGGAGGAGCTCTGTGCTCAGAGCCCG
 CGGTTGCTGGTGAACCTTAAAGTCCTGGTTGAAGACAGAGTGAACCTGTACGGAATAGAAATAGAAAGTAACTGAT
 ATTAACGACAGAGGCCCAAAGTTCCAGGCCGAAAGCTGGAAGTAAAAATTAACGAAATCGCGGTTCTCGGAGCA
 CGTTATCCACITCCAGAAAGCTATTGATCCGGATGTTGGCGTGAACCTCCCTCCAGAGCTACCAGCTCAGCCCAAT
 CACCACCTTCTCCTGAACGTGCAGACTGGAGACAATGGAGCCATAAACCCAGAGCTGGTGCTGGAGCGGCCCTG
 GACAGGGAGGGGCAATCGCCACCACCTGGTCTCTCAGGCTCGGATGGCGGCGAGCCGCTGCTCCAGCACA
 GTGCGCATCCATGTGACAGTGTGGATACAAATGATAATGCCCGGGTTTTTGCTCAACGGATTTCAGGATTAA
 GTCCTTGAGAACGTGCCCCAGGCCACCTGGCTGCTTACTGCAACAGCAGCGACCTGGATGAGGGAATCAACGGA
 AAAGTGGCATACAAAATCTGAAAAATTAATGAAAAACAATCTCTGCTATTCCAGCTTAATGAAAACTCTGGGAA
 ATATCAACAGCAAAAGTCTAGATTATGAAGAAATGTTTATTTATGAAATGGAATACAAGCTGAAGATGGTGGG
 GGATTGAAAGGGTGGAACAAAGTGCTCATTTCGGTGGAGATGTAATGACAATAGACCTGAAGTGACCATTA
 TCTCTGTTTAGCCAGTGTGAGAGAACGCACCTCAGGGAACAGTAATCTTCTTTTCAATGTCTCAGCCGAGAC
 TCCGGGAAGAATGGTCAAGTTGTCTGTTCTATCCAGGAGAATCTACTCTTACATGAAATTCAGAAAGAT
 TATTACAGATTGTTGACGGGCCAAATTTTGACCGAGAAAAAGCCTCAGAATATAATATCACGGTGACTGCAACA
 GACAGAGGAACCTCGGCCCTGTCCACAGAAATTCACATCACCTCGCAAGTGACTGACATCAATGATAATCCACT
 GCTTTCTCTCAAGCTCTCTACTCAGTCTACTCCGGAAAAACAACGCCAGGAGTCTTCCATCTTCTCCGTGATT
 GCCTATGACCTTGATAGCAATGAGAAATCTAGAGTTATTACTCCTTGGCAGAGGATACCATCCAAGGGTCTCTCT
 CTCCACCTATGTCTCTATTAACTCAGACACTGGTGCTGATGCTGTGCTCTTGTGACTATGAGCAGTTT
 AGAGATTGCAAAATGCAAGTTAGCGGCAAGTGACAGCTGGAAGCCCACTTAGCAGCAATGTGTCAATTGAGACTG
 TTTGTTTGGGACAGAAATGACAATGCCCGAGAAATCCTGTACCTGCCCTCCCACTGTATGGTTCTACTGGTGTG
 GAGCTGGCACCCCGCTCTGCAGAGCTGGCTACTCTGGTGACCAAGGTGGTGGCAGTGGACAGAGACTCAGGCCAG
 AATGCTTGCTCTCTACCGCTATTCAAGGCCAGTGAGCCAGGGCTCTTCTCGGTGGGGCTGCACAGGTTGAA
 GTGCGCACAGCTCGGGCCCTGTAGATAGAGATGGCTCAACACAGAGCCTTGTGGTGCTGTACAGGACCTAGGC
 CAGCCCCCTCTCGGGCACTGTACGCTCACAGTAGCCATAGCTGACAGACTCCAGACACTCTGGCTGACCTG
 GGCAGTCTTCAGATCCCTGCAGACCTGGAGGCCCTCAGACCTTACCTCTACTCTGTTGGCTGTGGCAGTCTGCT
 TCCTGTGCTCTCCCTACCTTCGTTATCACGCTGCTGGCCCTCAGGCTGAGGCCACTGGCACTCTCTGCATCTGCTG
 CGGGCTACCAAGTATGGTTGGCTGGTGTGCCACCTCACACTTTGTGGGTGATAGATGGGGTTGAGCTTTCTCTA
 CAGACCTATTCTCAGGAGTTCTCCCTCACCGCTGACTCAAGGAAGAGTCACTGATCTTCCCCAGCCCAACTAT
 GCAGACACACTATCAGCAGCAGACAGCTGTGAGAAAAATGAGCCTTTGTGCTGCTCTGTTGATTCGAATTTCTCT
 ATAGAAGACACCCCTTTGGTTCCGCAAGCCCGGCCCAACACGGAGCTGGCGTTTCTCTCAGGCCACAGAGACCGCGG
 ACCAGCGGCTCCAAAATGGCGATGACACCGGCACCTGGGCCAACCAACCACTTGTGACACAGAGATGCTGCAAGCC
 ATGATCTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCTTGGGAGGGGGTCCCGCACCATGGGATTG
 AGCGCCCGCTACGAGCCCGAGTTCACTCTGCAGCAGCTGCCCGACTACCGCCAGAATGTCTACATCCAGGCAGC
 AATGCCACACTGACCAACCGCAGTCTGGCAAGCGGGATGGCAAGGCCCGCAGAGGTGGCAATGGCAACAAAGAAG
 TCGGGCAAGAGGAGAAAGAGTACATGAGGAGCCAGGCCAAGAGGCCACGGGCGCCTCTCCCAACACCGCCAG
 CTCTCTTACTCTGCACCCAGGCTCAGAGTTTTCAGGGCTAACCCCGAGAATCTGCTAGGAGGCCACCGCCATG
 TCCCTTGGGAAACAGAAACAAGTGCCAGTCAGCACCTACCCCTTCCCCCGAGGGGGTTGAATATGCAAAAGC
 AGTTTCGCTGGGAACCCCAATCAATCAACTGCTGTACCATGGGGTAGTGGGGTTACTGTAGACACCAAGAAC
 CATTTGCAACACCCCGTTTAGTTAGTACAGCTGAACCTCTCCATCTTCCAATCAATCAGGCCCATCCATCCATGCC
 TCCTCTCTCCCCACCCCATCCAACAGTCTCTCTTCCGAGTAAGGTGGTTGGGGTGTGAAGTACCAAGTAAC
 CTACAAGCCTCTAGTTCTGAAAAGTTGGAAGGGCAGTCAGCTCTTGGGCTCTCTTGTGATTCATCTCTTCC
 CCAAGACATGGTTTGGTGGCGAGCCCTTCACTCTTCCAGAGCCCAAGTCAATGCTCAAGTTTGGAGGACA
 TGATACCACTCCCATGTGTACTGATGCTGCTGGATTAGGGAGGGCAATTTGCTACCAAGCCTCTTCCCAACGC
 CCTGGGAGCAGCTCTCTGTTTIGTTTTCATTGTTGACGTTTCCACTGATGCTGCTGACTTCCCCCACTCTCT
 CCTCAACAAAGAGACTCCACTGCATGTTCCAAGACAGTATGGGTGGTAAGATAAGGAAGGGAAGTGTGTGATG

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FIGURE 1752B

TGGATGGTGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAG
GGGACTGACAACATCCTCCAGATTCAGGCCATAAACCAATAACTAGGCTGGACCTTCCCACTACATAATAGGGC
TCAGCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAAACTTGGCATTTCAGTCCAAGGAAGCT
CGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGAGGGCCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCC
ACTGGTGAAGGGTCAGCGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTGGGGA
GGCAGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCTG
CCCTCCTGAAGCCTCAGTCTTCACTTGCCAGGTGCCGTTTCTCTTCCGTGAAGGCCACTGCCCAGGTCCCCAG
TGCGCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCGAGTGCCTCCTGTGCATAGACCTTCTTCTCCACCCC
CTTCTGCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCG
CCCCCTCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCGGTGTGCTTTACGTGATGGCGGGTGGGC
AGCGGGGCGGGCTCCGCGCAGCCGCTGTCTCTTGATCTGCCCGCGCGGCCGCTGTTGTGTTTTGTGCTGTGT
CCACGCGCTAAGGCGACCCCTCCCCGCTACTGACTTCTCTATAAGCGCTTCTCTCGCATAGTCAGTAGCTC
CCACCCACCCCTCTTCTGTGTCTCAGCGAAGTTTTATACTCTAATATTTATATGCGTTTTTCTTCGACAAAA
AAATAATAAAGCTTCTTCTGAAAAGCTG

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FIGURE 1753

MAAPTCKQLRGRLLVLLCSLLGMLWEARASQIRYSVPEETEEKGYIVGNISKDLALEPRELAERRVRIVSRGRTQLF
SLNPRSGTLVTAGRIDREELCAQSPRCLVNFKVLVEDRVKLYGIEIEVTDINDSAPKFQAESLEVKINEIAVPGA
RYPLFEAIDPDVGVNSLQSYQLSPNHFSLNVQTGDNGAINPELVLERALDREEATAHHLVLTASDGGEPRRSST
VRIHVTVLTDNDNAPVFAQRIYRVKVLNVPPGTWLLTATASDLDEGINGKVAYKFWKINEKQSLLFQNLNENTGE
ISTAKSLDYEESCFYEMEIQAEDGGGLKGWTKVLSVEDVNDNRPEVTITSLFSPVREDAPQGTVILLFNAHDRD
SGKNGQVVCISIENLSFTLENSEEDYYRLLTAQILDREKASEYNIIVTATDRGTPLSTEIHIITLQVTDINDNPP
AFSQASYSVYLPENNARGTTSIFSVIAYDFDSNENSRVIYSLAEDTIQGSPLSTYVSINSDTGVLYALCSFDYEQF
RDLQMQVATASDGSPPFLSSNVSLRLFVLDQNDNAPEILYPALP TDGSTGVELAPRSAEPGYLVTKVVAVD RDSGQ
NAWLSYRLFKASEPGLFSVGLHTGEVVRTARALLDRDALKQSLVVAQDHGQPPLSATVTLTVAIADSI PD ILADL
GSLQIPADLEASDLTLYLVVAVAVVSCVFLTFVITLLALRLRHWHSSHLLRATSDGLAGVPTSHFVGVDGVRAFL
QTYSQEFSLTADSRKSHLIFPQPNYADTLISQQSCEKNEPLCVSVDSKFPIEDTFLVPQAPNTDWRFSQAQRPG
TSGSQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYIPGS
NATLTNAAGKRDKAPAGGNGNKKKSGKKEK

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FIGURE 1754A

ATGCAGAGAGCCAGAGAAGCCGAATGATGAAAAGTCAGGTACTGTTTCCCTTCTGCTGCTTTGTTCTGCGGG
GCCATCTCCCGACGATCCGATACACGATTCCAGAGGAGCTAGCCAACGGCTCACGGGTGGGGAAACTTGCCAAAG
GATCTGGGGCTCAGTGTCCGGGAGTTTGCCAACTCGAAAACCTCGGGTTAGTCAGAGGATTTATTTCAACGTTAGT
TTGGAGAGCGGGGATTTGTTAGTGAACGCTAGGATAGATCGAGAGAAGATTTCGGAAGGAACTTGAGTGTGCA
CTAGAATTCGAAACGGTCGCTGAANACCCAATGAATGTTTCCACGTGGTTGTTGTAATCCAAAGATATTATGAC
AATGACCCACGCTTTCTGTTGCAAAAGGCATTGACTTAGAAATTTTGAGTCAGAGCTTACCCGGGGTAAAAATTCTCT
CTGGATTCTGCTCAAGATGCAGATGTGGAAGGCAATCACTGAAGTTATACACCATCAACCCCAATCAATACTTCT
TCTCTGTCAACGAAGGAAAGTCTGTGGAAGTAAATATCCGGTATTACTGCTGGAAAAACCTCTAGACAGGGAA
CATCAGAGCTCTCATCGCTTAATCTGACTGCCATGGATGGCGGGGACCCGCTCTAAGCGGCACCCACCATATC
TGGATCCGAGTTACGGATGCCAATGATAATGCTCCCGTGTTTAGCCAGGAGGTATACAGGGTTAGCCTCCAAGAA
AACGTACCGTGGGGAACCTCCGTGCTGCGGGTGATGGCCACAGACCAGGATGAGGGCATTAAATGCAGAGATCACC
TATGCTTCTCTCAATTCGCCAATAAGTACAGCCCTTCTCAATCTCAATCAAATACTGGCGACATCACAAACCAAT
GGCACATTGGATTTTGAAGAGACAAGTAGATATGTTGTAGGTGGAAGCTAAGGATGGAGGAGTACACACAGCT
CACTGTAATGTTCAAATAGAATTTGTTGACGAGAATGACAAATGCCCCAGAGGTGACATTATGTCCTTCTCTAAC
CAGATTCCGAGAGGATTCAGACCTTTGGAAGCTGTAATAGCCCTCATAAAAGTCGCGAGACAAGGATTCGCGGCAAAAT
GGCATGGTGACATGCTATCTACCTAGGAAGAAGTTCCTTTCAAATTAGAATCCACCTCGAAGCAATATTACAGAGCTG
GTGATTGCTGGAGCCCTAAACCGGGAGCAGACAGCAGACTACAACGTCACAATCATAGCCACCGACAAGGCAAA
CCAGCCCCTTTCTCCAGGACAAGCATCACCTGACATCTCCGACATCAAGGACAATGCACCTGTTTCCATCAG
GCCTCCATATGTGGTCCACGTGTCTGAGAACAAACCCACTGGCGCTCCATTGACACAAGTAAGCGCTCCGACCGG
GATTTGGGACCCAACGGCAGAGTCTCTACTCTATTCTGGCCAGTGACCTGGAGCGCGGGGAGCTGTGTCTCTAC
GTGTCGTGAGCCGCGAGA3CGGGGTGGTGTTCGCGCAGCGGCTCTGCACAGCAGCTGCGCGCTCTGGCGCTTCGAG
CTCACACTGCAGGCCAGGGACCAGGGCTCCCCCGCGCTCAGCGCCAAAGTGAGCCTGCGCGTGTGGTGGGCGAC
CTCAATGACAATGCGCCACGGGTGCTGTACCCCGCGCTGGGGCTCATGGCTCGCGCTTCTCGATATGGTGCCA
CGCGCGCAGAGCCCGGCTACCTGGTGACCAAGGTGGTGGCGGTGACGACGAGCTAGGACACAACGCTTGGCTG
TCTTACCAGTGTCTGACGGCCAGCGGACGCCCGGGCTTCTCAGCCTGGGGTTGCGCACGGGTGAGGTGCGCACAGCG
CGTGGCTTGGGCGACAGGAGCCGGCGGCCAGCGCCTGCTGTGCTGCTGTGCTGATGGAGGACAGCCGCCACT
TCCGCCACCGCCACGCTGCACCTAACTCTCGCGGATAGCCTGCAAGAGGTATTGCCAGACCTCAGCGACCGCCCT
GAGCCCTCTGACCCCGACAGCGGAATGCAGTTTTACCTGGTGTGGCCTGGCCTTGATCTCAGTGCTCTTTCTCT
CTCGGGGTGATTCTAGCGCTAGCCCTGCGCCTGCGACGCTTCTCAGCCTCGACCTCAGGCTGCTTTTCAAACCC
GGTCTTGCTCTCAAAGTCTGGGCGCGGGGTCTCTCCCAACACAGCGAGGGGACTTTGCCCTATTCTCAACTCTA
TGATTGGCTCTCATTCTGCAAGACAGAGTTTAATCTCTCAACCTGACACCGGAAATGGTCTCCCCCTCAGGAT
CTGCTGTGTGATGATCTCTTTGTTGGTTGATGTGCGAGTAAGAATGCTCTAGACCTTTAGACCCCTTTGTTG
TCTTTCGACCAAGCCCCCGCCCAACAGGACTGGCGTTTCTCTCAGGCCAGAGACCCGGCACAGCGGCTCCCCA
AATGGCGATGACAGCTGCTGCGGCCACTCGGCCCAACAACCACTTTGACACAGAGATGCTGCAAGCCATGATCTTGGGCTCC
GCCAGTGAAGCTGCTGATGGAGCTCCACCTTGGGAGGGGGTGGCGGACCATGGGATTGAGCGCCCGCTACGGA
CCCCAGTTCAACCTGCGAGCAGTGCCCGACTACCGCGAGAATGTCTACATCCGAGGCGAGCAATGCCACACTGACC
AACGAGTGGCAAGCGGGATGGCAAGGCCGCCACGAGGTGGCACTGGCAAGCAAGAAGTTCGGGGAGAAGGAG
AAGAAGTAAATCGAGGAGGCCAAGAGGCCACAGGGCGGCTCTCCCAACAGCCAGCTTCTCTTCACTGCA
ACCCAGGCTCTCAGATTTTCAGGGCTAACCCCAAGATACTGGTAGGGGCCAAGGCCATGCTCCCTTTGGGAAACA
GAAACAAGTGCCAGTCAGCACCTACCCCTTCCCCCGAGGGGGTTGAATATGAAAAGCAGTTCCGCTGGGAAC
CCCCATCCAATCAACTGCTGTACCCATGGGGTAGTGGGGTTACTGTAGACACCAAGAACATTTTGCCACACCCC
GTTTAGTTACAGCTGAATCTCTCATCTTCCAATCAATCAGGCCCATCCATCCCATGCTCCCTCCTCCACACC
CACTTCCAAACAGTTCTCTTTCCCGAGTAAGGTGGTGGGGTGTGTAAGTACCAAGTAACTACAGAGCTCCTAG
TTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTGTTGATTCAATCTTCCCCCAAGCAGTGGTT
GGTGCCAGCCCCCTTCACTCTTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGATCACCATCCCCA
TGGTAGCTGATGCTTTCGGATTAGGAGGGGCAATTTGCTACCAAGCCTCTTCCAACGCTTGGGAGACAGTCT
TCTGTTTGTGTTTGTGCTGATTTCACCTTTCACCTGCAATGCCTTGACTTCCCCCACTCCCTCTCAACAAGAGAC
TCCACTGCAATGTTCCAAGACAGTATGGGGTGGTAAGATAAGGAAGGAAGTGTGTGGATGTGGATGGTGGGGCA

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FIGURE 1754B

TGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCTCAGGGGACTGACAACATC
CTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCCTTCCCACTACATAATAGGGCTCAGCCAGGCAGCC
AGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGG
ACCAGGTCCCTTGAGAGGTCAGAGGGGCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGAAGGGTC
AGCGGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTTGGGGAGGCAGGGAGCTAGGG
CAGGGACCAAATGAACAGAAAGTCTCAGCCAGGATGGGGCTCTTCAACAGGGGCCCTGCCCTCCTGAAGCCTC
AGTCCTTCACCTTGCCAGGTGCCGTTTCTCTCCGTGAAGGCCACTGCCAGGTCCCCAGTGCGCCCTCTAGTGG
CCATAGCCTGGTTAAAGTTCCCCAGTGCCCTCTTGTCATAGACCTTCTTCTCCACCCCTTCTGCCCTTGGGT
CCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGAGCGCCCCCTCCCTCTTTC
GGCTGGTGTAGAAATAGCCAGTAGTGTAGTGCGGTGTGCTTTTACGTGATGGCGGTGGGCAGCGGGCGCGGGCT
CCGCGCAGCCGTCTGTCTTGTATCGCCCGGGCGGCCCGTGTGTGTTTTGTGTGTGTCCACGCGCTAAGCG
ACCCCTTCCCCGTACTGACTTCTCCTATAAGCGCTTCTCTTCGCATAGTCAGTAGCTCCACCCACCCCTCTT
CCTGTGTCTACGCAAGTTTTATACTCTAATATTATATGGCTTTTTTCTTCGACAAAAAATAATAAACGTT
TCTTCTGAAAAGCTG

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FIGURE 1755

MQRAREAEMMKSQVLFPFLLSLFCGAISQQIRYTIPEELANGSRVKGKLAKDLGLSVRELPTRKLRVSAEDYFNVS
LESGDLLVNGRIDREKICGRKLECALEFETVAENPMNVFHVVVVIQDINDNAPRFVAKGIDLEICESALPGVKFS
LDSAQDADVEGNSLKLYTINPNQYFSLSTKESPDGSKYPVLLLEKPLDREHQSSHRLILTAMDGGDPPLSGTTHI
WIRVTDANDNAPVFSQEVYRVSLQENVPWGTSLVRVMATDQDEGINAEITYAFLNSPISLFLNLPNTGDITTN
GTLDFEETSRYVLSVEAKDGGVHTAHCNVQIEIVDENDNAPEVTFMSFSNQIPEDSDLGTIVIALIKVRDKDSGQN
GMVTCYTQEEVPFKLESTSKNYKLVIAAGLNREQTADYNVTIIATDKGKPALSSRTSITLHISDINDNAPVFHQ
ASYVVHVSENNPPGASIAQVSASDPDLGPNGRVSYSILASDLEPRELLSYVSVSPQSGVVFAQRAFDHEQLRAFE
LTLQARDQGGSPALSANVSLRVLVDLNDNAPRVLYPALGPDGGSALFDMVPRAAEPGYLVTKVVAVDADSGHNAWL
SYHVLQASEPGLFSLGLRTGEVRTARALGDRDAARQRLVAVRDGGQPPLSATATLHLIFADSLQEVLPDLSDRP
EPSDPQTELQFYLVVALALISVLFLLAVILAIALLRLRRSSSLDTEGCFQTGLCSKSGPGVPPNHSEGTLPYSYNL
CIAHSAKTEFNSLNLTPEMAPPQDLLCDDPSMVVCASNEDHKIAYDPSLSSHQAPPNTDWRFSQAQRPGTSGSQ
NGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYIPGSNATLT
NAAGKRDGKAPAGGNGNKKKSGKKEK

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FIGURE 1756A

ATGAAAGCGAGCTCAGGGAGGTGCGGGCTGTTGCGGTGGCTGCAGGTACTGTTGCCCTTCTGTGTTCTTTGTTC
 CCCCggggctctccagctgcagatccgctattcaattccagaggagctggccaaaaaatctcggtcgtatggaaaacctc
 GCCAAGGATCTGGGGCTCAGCGTCCGGGACTTGCCAGCCCGGAAGCTGCGGGTAGCGCGGAGAGGAATATTTT
 ACAGATAAACCCAGAAAGCGGAGACTTACTTGTGAGTGACAGAATAGACCGGAGAACAGATATGCGGGAAGCAGCCT
 CTGTGTGTTCTCGATTTCGATATCTGCTGCTGAAATCCCAATAATTTTCTACATAGCAGTAATTTGTGCAGGAT
 ATAAATGATAAATACCCGCTATTCAAACAGACTAAGTAATTTAAAAATTTGGCGAATCCCATAGCCAGGTACA
 ACATTTCCACTTGACCAGCCCTGGATTGATGTTGGTCTTAACCTCACTACAAGATACCACCTTAATGACAAC
 GAGTACTTTGATCTCGTGAGAAACAGACTCCAGATGGTCGTAATATCCTGAGTTGATTTCTAAACACTCTCTG
 CAGAGAGAAGAGCAGCTTTACATCAATTGGTCTCAGAGCTGTGGATGGCGGAGACCCACCTCAAAGTGGCAG
 ACCCAAATCCGAATCAAAGTCACGGATGCCAACGATAACCTCCAGTGTTCAGCCAGGACGTGTACAGGGTCACC
 CTGAGGGAGGACGTGCCGCCGGGCTTCTTTGTGCTTCAAGTGACAGCCACCGACCGGGATGAAGGCATAAACGC
 GAGATCACCTACTCCTTTCAATAATGTGGACGAACAAGTGAACACTTTTTCAACTTAATGAAAAACAGGAGAA
 ATCACGACAAGGATGATTTGATTTTGAGATTGCAAGTAGTTACACTCTGAGTATCGAAGCAAAAGATCCTGGA
 GATCTAGCAGCCCACTGCAGTATCCAAGTTGAATTTCTTGATGACAACGATTGTGCACCTGAAGTTATTTGTGACT
 TCGATTATCTACTCCGCTACCGGAGGATTCGCCACCAAGGACAGTGATCGCCTTGATAAAAACAGAGAGACAGAGAC
 TCTGGAGAAATGGGAAGATTTACTGCCAAGTGTGGGAAGTGCCAAGTTTATTTTGAATCTTCCCTCAAGAAC
 TATTACAACTAGTGACAGAGCGCGCTCTGGACCGGAGGAGATCCAGAATAACAATCTCACCATCAGAGCCACC
 GACGGGGGCAAGCGCCGCTCTCTCCAGCATAAATGTCAACCTGCACATCTCCGAGCTCAACGATAATGCCCA
 GTTTTCCAAAGACTTCTACATGTTCACTGCGCAGAGACAATCTCTGCGCGCTCTATCGCTCAAACTAGT
 GCCTCTGACCTGACTTGGGCGCCAGTGGCCAAGTTTCTACTCCATCGTAGCCAGGACGTGAAGCGCGGGGAG
 ATTTTATCTACGTGTCGTGAGCGCGCAGAGCGGGTGTGTTTTCGCGCAGCGCGCTCGATCATGAGCAGCTG
 UCGCGCTTCGAGCTCACACTGCAGCGCCGCGACCGAGGCTCGCCCGCGCTCAGCGCCAACGTGAGCTGCGGTG
 TTAGTGGGCGACCTCAATGACAAATGCCCCACGGGTGCTGTACCCCGCGCTGCGGCGCTGATGCTCCGCCCTCTTC
 GATAAGTGGCCACGCGCGCAGAGCCCGGCTACTCTGGTGACCAAGTGTGGCGGTGGAACGAGCTGTCAGGCAC
 AACGCTTGCTGCTCTACACGTGCTGCAGGCCAGCGAGCCCGGGCTCTTCAGCTCGGGTTGCGCAGCGGTGAG
 GTGCGCACAGCGCGTGCTTGGGCGACAGGGACGCGGCCGCCAGCGCTGCTGGTGGTGGCTGTCGATGAGGAGA
 CAGCGCCACTCTCGCTACGGCCACGCTGCACCTAATCTTCGCGGATAGCTGCAAGAGATTTCGACAGCTC
 AGCGACCGCGGGAGCCCTCTGACCCCAAGGCAAACTGCAGTTTACTCGTGGTGTGGCTTGGCCTTGATCTCA
 GTGCTCTTCTTCTCGCGGTGATCTTGCAATCTCCTTGCGCTGCGACTCTTTCAGGTGAGCTGCTTGGGAC
 TGTTTTACGCTGTCTCAGCTCCAAGCTGGACCTGGGGTTCTCCCAATACAGTAGGGGTACATTGCCCTAT
 TCTTACAACCTGTGTTGCCCTACAATCAGCCAAAGACAGAGTTCAATTTTCTGAACATAACCCCGGATTTGGTT
 CCGCGCAAGATCTCGTCTGTGACAAATGCCCTCTGGGAACAATAAATAACAATCTGAGGCGCTGGGGTCTTTTT
 GCCTCAGATATCTATTTTGAAGCAAGCCCGCCCAACACGGAAGTGGCGTTTCTCTCAGGCCAGAGACCGCGCAC
 AGCGGCTCCCAAATGGCAGTACACCGGCACTGGCCCAACACCAAGTTTGACACAGAGATGCTGCAAGGCATG
 ATCTTGGGCTCGGCCAGTGAAGCTGCTGATGGGAGCTCCACCTGGGAGGGGGTGC CGCGCACCATGGGATTGAGC
 GCCGCTACGGAACCCAGTTCACTCTGCAGCAGTGGCCGACTACCGCCAGAATGTCTACATCCAGGCAGCAAT
 GCCACACTGACCAACGCACTGGCAAGCGGATGGCAAGGCCCAAGAGTGGCAATGGCAACAGAAGAAGTCG
 GGCAGAAGGAGAAGTATACATGGAGGCCAGGGCAAGAGCCACAGGGCGGCTCTCCCCAACCCAGCCGACCT
 CTCTTACCTGCACCCGCTCAGAGTTTACGGGCTAACCCCAAGATATCTGAGGGGCTGAGGCGCTGAGCTTCC
 CCTTGGGAACAAGAAACAGTGCCAGTCAGCACCTACCCCTTCCCCCCCCAGGGGGTTGAATATGAAAAGCAGT
 TCGCTGGGAAGCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCAT
 TTGCCACACCCCGTTTAGTTACAGCTGAACCTCTCCATCTTCCAAATCAATCAGGCCCATCATCCATGACCTCC
 CTCTCCCCACCCCACTCCAACAGTTTCTCTTCCCGATGAAGTGGTTGGGGTTTGAAGTACCAAGTAAACCTA
 CAAGCTCCTAGTTCTGAAAGTTTGGAGGGCATGACCTCTGGCCTCTCTTTGATCTCAATCTTCCCC
 AAAGCATGGTTTGGTGCCAGCCCCCTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGA
 TCACCATCCCCATGGTACTGATGCTGCTGGATTAGGAGGGGCAATTTGCTACCAAGGCTCTTCCCAAGCGCT
 GGGGACAGTCTCTCTGTTTGTTTTCAATGTTTGAAGCTTCCCATGATGCTTACCTTCCCCACCTCTCTCT
 CAAACAGAGACTCCACTGCATGTTCCAAGACAGTATGGGTGGTAAGATAAGGAAGGGAAGTGTGTGATGTGG

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FIGURE 1756B

ATGGTGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAGGGG
ACTGACAAATCCTCCAGATTCAGGCCATAAACCATAACTAGGCTGGACCCCTCCCACTACATAATAGGGCTCA
GCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAAACTGGCATTTCAGTCCAAGGAAGCTCGA
AGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTGAGAGGGGCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACT
GGTGGAAAGGTCAGCGGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTGGGGAGGC
AGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCCC
TCCTGAAGCCTCAGTCTTACCTTGCCAGGTGCCGTTTCTCTTCGTGAAGGCCACTGCCAGGTCCCCAGTGC
GCCCTTAGTGGCCATAGCCTGGTTAAAGTTCAGCAGTGCCTCCTGTGTCATAGACCTTCTTCTCCACCCCTT
CTGCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCC
CCTCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCCTGTGCTTTTACGTGATGGCGGGTGGGCAGC
GGGCGGCGGGCTCCGCGCAGCCGTCTGTCTTGATCTGCCCGCGCGGCCCGGTGTGTTTTGTGCTGTGTCCA
CGCGCTAAGGCGACCCCTCCCCGTACTGACTTCTCCTATAAGCGCTTCTCTTCGATAGTCAGTAGTCCCA
CCCCACCTCTTCTGTGCTCAGCGAAGTTTATACTCTAATATTTATATGGCTTTTTTCTTCGACAAAAAA
TAATAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1757

MKASSGRCGLVRWLQVLLPFLLSLFPGALPVQIRYSIPEELAKNSVVGNLAKDLGLSVRDLPARKLRVSAEKEYF
TVNPESGDLVSDRIDREQICGKQPLCVLDFDTVAENPLNIFYIAVIVQDINDNTPLFKQTKINLKIGESTKPGT
TFPLDPALDSVGVGPNLSQRYHLNDNEYFDLAEKQTPDGRKYPELILKHSLDREEHSLHQLVLTAVDGGDPPQSGT
TQIRIKVTDANDNPPVFSQDVYRVTLREDVPPGFVFLQVTAIDRDEGINAEITYSFHNVDQVKHFFNLNEKTGE
ITTKDDLDFEIASSYTLSEIAKDPGDLAAHCSIQVEILDDNDCAPEVIVTSVSTPLPEDSPPGTVIALIKTRDRD
SGENGVEVYCQVLGNAKFIKSSSKNYKLVTDGALDREEIPEYNLTIATDGGKPLLSSSIIVTLHISDVNDNAP
VFQQTSYMVHVAENNPFGASIAQISASDPDLGSPGQVSYSIVASDLKPREILSYVSVSAQSGVVFAQRAFDEQL
RAFELTLQARDQGSALSANVSLRVLVGDLDNDNAPRVLYPALGPDGSAFDMVPRAAEPGYLVTKVVAVDADSGH
NAWLSYHVLQASEPGLFSLGLRTGEVTRALGDRDAARQRLLVAVRDGGQPPSATA TLHLIFADSLQEVL PDL
SDRREPSDPQAKLQFYLVVALISVLFFLAVILAI SLRLRLSSRSDAWDCFPGLSSKPGPGVLPNYSEGTLPY
SYNLCVASQSAKTEFNFLNITPELVPAQDLVCDNASWEQNTNHGAAGVPPFASDITLKQAPPNTDWRFSQAQRPGT
SGSQNGDDTGTWPNNQFDEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSN
ATLTNAAGKRDGKAPAGNGNKKKSGKKEK

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FIGURE 1758A

ATCGGAAATAGCTCCGGATGGAGGGGCCACGAGGGCAGAGGCAGTATTCTCTCTCTCTCTTTGTTA
GACCAGGTCTCTCCGAACCGATCCGCTACGCTATTCCGAGGAGCTGGACAGGGGCTCGCTGGTAGGGAACCTC
GCCAAGCTCCTGGGTTTGGCGTGGGGGATTACCTACTAGGAACCTGCGGGTTATTGACAGAGAAGAAATCTTT
ACCGTGAGCCCCGAAATGGGAACCTTCTGTAGCGACCGTATAGACCGAGAGGAGATTGTGGCAAGAAGTCG
ACGTGTGTTCTGGAATTTGAATGGTGTCTGAAAGCCTTTAAACTTTTTTCATGTAACTGTGCTGATCCAGAT
ATTAAAGCAACCCACCGACCTTTAGGCCAAAATCTACTGAGCTGGAAATCAGCGAAGCTGGCTCTCACTGGAGCC
ACATTTGCCCTGGAATCTGCGCAAGATCCTGATGTAGGTGTCATTCGCTGCAGCAGTACTACCTCAGCCCTGAT
CCGCACTCTCTTTGATTCAAGAAGGAACTGGATGGCAGTAGGTACCCAGAGCTAGTACTGAAAGCACCCCTG
GACAGGAAGAGCAGCCACATCACCACCTGGTCTCTCAGAGCTGTGGATGGGGGCGAGCCCTCCAGAAGCTGTACC
ACCCAGATCAGGGTAATTGTGCGAGATGCAAAATGATAACCCCCAGTATTACTCAGGACATGTACAGGGTCAAT
GTTGCAGAGAACCTGCCCGCTGGCTCCTCCGATTTAAAGTGATGGCCATTGACATGGATGAGGGCATCAATGCC
GAAATCATCTATGCCCTCATCAATATTGGCAAGGAAGTGAGACAACCTGTTCAAGCTGGACAGTAAACGCGGGGAA
CTCACCCTATTGGAGAACTGGACTTTGAAGAGAGAGATAGCTACACAATTGGGGTGAAGCAAGGATGGTGGGA
CATCACACTGCATATTGTAAGTACAGATAGATATTTAGATGAAATGACAATGCCCGGAGATAACCTGGCT
TCTGAATCCCAATGATACAAAGAGATGCTGAGCTGGGGACTGCCGTTGCCCTGATCAAAACACATGATCTAGAT
TCTGGATTTAATGAGAATTCCTATGCCAACTAAAAGGAACTTCGCCCTTTAAATCTGTTCAAGATACCAAAAC
ACATACAGGTTGGTGACAGATGGAGCCCTGGACCGGGAGCAGATCCCAAGATAACAATGTGACGATCACAGCTACC
GACAAAGGCAATCCACCGCTCTCCTCCAGCAAGACCATCACTCTGCACATCCTTGATGTCAACGACCAAGCTTCCC
GTTTTCCACAGGCCCTCTACACCGCTGCATGTAGCTGAGAACAATCCGCTGGAGCCCTCCATTGCGCATGTGACA
GCCCTGGATCCCGACTTGGGACCTAATGGCCTTGTCTCCTACTACATCGTGCCGACGTGACCTGGAGCCGCGGGAG
CTGTCTGCTCCTAGCTGTGCTGGCGGCCGCGAGCGGGGTGTTGTTCCGCGCAGCAGCCTTGACACGAGCAGCTG
CGTGCCCTTCGAGCTCACTCTGCAGGCCCGGAGACCAGGGCTCGCCTACGCTCAGCGCCAACGTGAGCCTGCGCGTG
TTGGTGGACGACCGCAACGACAATGCACCGCTGGTGTGTATCCAGCCTCTGGGGCCCGAAGGCTCTGCGCTCTTC
GATATGGTGCCGCGCTCTGCAGAGCTGGCTACCTGGTGACCAAGGTGGTGGCGGTGGACAGCCTCGGGATAC
AAGCCTTGCGTGTCTTACCACTATTGTGACGGCCAGCGAGCCCGGGCTGTTGAGCCTGGGCTCTGCGCAGCGGTGAG
GTGCGCACGCGCGTACCTTGGGCGCAGGGAGGCGCGCCCGCAGCGCTGCTGGTCACTGTGCGTGATGGAGGA
CAGCAGCCTCTTTCAGCCACCGTCTGCTGCACCTAATCTTCGCAGATAGCTTGCAAGAGATACAACCTGACCTT
AGCGACCGCCCCACTCCTCTGACCTCAGGCGGAGCTACAGTTTCACTAGTAGTGGCTTGGCCCTGATCTCA
GTGCTTCTCCTCTCGCGGTATTCTGGCAATCTCCTGCGCCTGCGATGCTCCTCCAGACCCCGCACTGAGGGC
TACTTTACGCTGGTGTCTGCTTCAAGACTGTACTGGAGTTCTCCCCACCTACAGCGAAAGGACTTTGCCCTTAT
TCTTACAATCCGTTGCTGCTTCAATCTCTCAAACAGGAGTTTAAATTTCTCAATATAAAGGCTGAAATGTCT
GCACCAAGATTTCTTATGTATGAAGCCTCTTGGTTGAAAGTAAATGACAATCAAGAAGATGCTCTTAATTCA
GGCAATTTGCAAAAGCAAGCCCGCCCAACACGGAAGTGGCCTTCTCTCAGGCCGAGAGACCCCGGACAGCGGG
TCCCAAATGGCGATGACACCGGCACTTGGCCCAACAACTTGGACACAGAGATGCTGCAAGCATGATCTTGT
GCGTCCGCCAGTGAAGCTGCTGATGGAGCTCCACCTTGGGAGGGGGTGC CGGCACCATGGGATGAGCGCCCCG
TAGGACCCCAAGTCTACCTCTGCAGCAGTGGCCGACTACCGGCAGAAATGTCTACATCCGAGCAGCAATGGCCACA
CTGACCAACGCAGCTGGCAAGCGGTGAGCAAGGCCCGCAGCGTGGAAATGACCAAGAAAGATCGGGCAAG
AAGGAGAAGAAATGACATGGAGGCCAGGCCAAGAGCCACAGGGCGGCCCTCTCCCAACAGCCGACGCTCTCTCTT
A C T G C A C C C A G G C C T C A G A T T C A G G G C T A A C C C C A A G A A T A T G T G T G G G G C C A A G C C A T G C T C C C T T G G
G A A A C A G A A A A A G T G C C C A G T A G C A C C T A C C C C T C C C C C C A G G G G T T G A A T A G C A A A A G C A G T T C C G C T
G G G A A C C C C A T C C A A T C A A C T G C T A C C C A T G G G G T A G T G G G G T T A C T G T A G A C A C A A A A C C A A C C T T G G C A
C A C C C G T T T A G T T A C A G C T G A A C T C C T C A T T C C A A A T C A A T C A G G C C C A T C C A T C C A T G C C T C C C T C C T
C C C A C C C C A C C A A G A G T T G C A T T T C C C G A G T A A G G T G G T G G G G T G T T G A A G T A C C A A G T A C C C A A G C C
T C C T A G T T C T G A A A A G T T G C A A G G C C A T C A T G A C C T T T G A G C C T C T C A A T C T T C A A C T T C C C C A A A G C A
T G G T T T G T G T G C C A G C C C C T C A C C T C C T C C A G A G C C C A A G A T C A A T G C T C A A G T T T T G G A G A C A T G A T C A C C A
T C C C A T G T A C T G A T G C T T G C T G A T T A G G A G G G C A T T T T G C A C C A A G C C T C C C A A C G C C C T T G G G A C
C A G T C C T C T G T T T G T T T G T T G A T T T G C A G T T T C C A G T T T C C A G T T T C C C C C A C C T C C T C T C A A A C A
A G A G A C C C A C T G C A T G T T C C A A G C A G T A T G G G T G G T A A G A T A A G A A G A A G T G T G G A T G T G G A T G G T G G T

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FIGURE 1758B

GGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCTCAGGGGACTGAC
AACATCCTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCCCTTCCCACATACATAATAGGGCTCAGCCCAG
GCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAAACTTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGG
TTTAGGACCAGGTCCCTTGAGAGGTGACAGGGGCCCTCTGTGGTGCTGGGTACTCCAGAGGTGCCACTGGTGGAA
AGGGTCAGCGGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTGGGGAGGCAGGGAG
CTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCAGGATGGGGCTTCTCAACAGGGCCCCCTGCCCTCCTGA
AGCCTCAGTCCTTCACTTGCCAGGTGCCGTTTCTCTTCGGTGAAGGCCACTGCCAGGTCCCCAGTGCGCCCCC
TAGTGGC CATAGCCTGGTTAAAGTTCCCCAGTGCCCTCCTTGTGCATAGACCTTCTTCTCCACCCCCTTCTGCC
CTGGGTCCCCGCCATCCAGCGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCCCCTCCC
TCTTTCCGGCTGGTGTAGAAATAGCCAGTAGTGTAGTGCGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGGCGG
CGGGCTCCGCGAGCCGTCTGTCTTGTATCTGCCCGCGGCGGCCGTGTTGTGTTTGTGCTGTGTCCAGCGCT
AAGGCGACCCCTCCCCGTACTGACTTCTCCTATAAGCGCTTCTCTCGCATAGTCACGTAGCTCCACCCAC
CCTCTTCTGTGTCTACGCAAGTTTTATACTCTAATATTTATATGGCTTTTTTCTTCGACAAAAAATAATAA
AACGTTTCTTCTGAAAAGCTG

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FIGURE 1759

MGNSSGWRGPAGQRRMLFLFLLSLLDQVLSEPIRYAIP EELDRGSLVGNLAKDLGFGVGDLPTRNLRVIAEKKFF
TVSPENGNLLVSDRIDREEICGKKSTCVLEFEMVAEKLNFHFVTVLIQDINDNPPTFSSQNITELEISELALIGA
TFALESAQDDPDVGVNSLQYYLSPPHPSLIQKENLDGSRYPELVKAPLDREEQPHHHLVLTAVDGGEP SRCT
TQIRVIVADANDNPPVFTQDMYRVNVNAENLPAGSSVLKVMADMEGINAEIITYAFINIGKEVRQLFKLDSKTGE
LTTIGELDFEERDSYTTIGVEAKDGGHHTAYCKVQIDISDENDNAPEITLASESQHIQEDAEELGTAVALIKTHDL
SGFNGEILCQLKGNFFFKIVQDTKNTRYRLVTDGALDREQIPEYNVTITATDKGNPPLSSSKITLHILDVNDNVP
VFHQASYTVHVAENPPGASIAHVRASDPDLGPNGLVSYIVASDLEPRELSSYVSVARSQVVFQRAFDHEQL
RAFEITLQARDQGSPTLSANVSLRVLVDDRNDNAPLVLYPALGPEGSALFDMVPRSAEPGYLVTKVVAVDADSGY
NAWLSYHIVQASEPGLFSLGLRTGEVRTARTLGDREARQRLVTVRDGGQPLSATVMLHLIFADSLQEIQPDL
SDRPTSPDPQAELOFHLVVALALISVFLAVILAI SLRLRCSSRPATEGYFPQGVCFKTPVPGVLPTY SERTLPY
SYNPCAASHSSNTEFKFLNIKAENAAPQDLLCDEASWFESNDNEMPSPNSGNLQKQAPPNTDWRFSQAQRPGTSG
SQNGDDTGTWPNNQFDTEMLQAMILASAEADGSSTLGGGAGTMGLSARYGPOFTLQHVVPDYRQNVYIPGSNAT
LTNAAGKRDGKAPAGGNGNKKKSGKKEK

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FIGURE 1760A

ATGGGGAGCGCGCCGGGAGCTGGGCCGGGCTGAGAGGCTGCCAGTGTCTTTCTCTTCCTGCTGTCTTTGTTCTGCCC
GGCGCTCTGTGAGCAGATCCGCTACAGGATTCGCCGAGGAAATGCCAAGGGCTCCGTATGGGGGAACCTC
GCCACGGACTTGGGGTTCAGCGTCCAGGAGTTACCGACTCGAAACTGCGGCTCGCATTCGGGAGAAGCTTACTTC
ACC GTGAGCGCAGAGAGCGGGGAGTTGCTTGTGAGCAGCAGGCTAGACAGGGAGGAGATATCGCGGGAAGAAGCCA
GCTTTGCTGTCTGGAAATTTGAGGCTGTTGCTGAAAAATCCACTGAACATTTTATCACGTGAATGTGGAGATCGAGGAC
ATTAATGACCAACAGCCAAATTCACGCAAAATTCCTTTGAGCTGCAAAATAGTGAGTCTGCACAGCTCGGCACA
AGATTTATACTAGAAGTAGCAGAAGATGCAGATATTGGCTTAAACTCTCTGCAGAGTATAAACTCTCTCTTAACT
CCAAGTTTCTCATTAATAATTAAAGGAGAAACAGGATGCTAGTAAATACCCGGAACCTGGCACTGGAGAAAACCTTA
GACCGGGAACACAGAGTTACCATCGTTTAGTCTGACTGCGCTTGGACGGTGGACATCCACCCCTAAGCGGCACC
ACTGAGCTCCGGATCCAGGTAACCGACGCCAATGATAATCCCCCGGTATTCAACCGAGACGTGTACAGAGTCAGC
CTTCGGGAAAACGTGCCACCGAGCACCAGTGTGTTGCAAGTGTGAGCACTGACCAAGACGAGGGCATCAACTCA
GAAATTACTTATCTCTTCTACAGAACCGGGCAAACTCTTAGTCTGAATTCAAAGAGCGGAGAAATTACCACCTCA
AAGAACTGGATTTTGAAGAGACCAAGGAATATTCAATGGTTGTAGAAGGAGGGATGGTGGTGGACTGGTTGCA
CAATGTACAGTTGAAAATTAATATTCAGATGAAAAATGACATAGCCCAAGGTACATTCATCTCTACTTTGAA
ATGATTTCTGGA AAAACCGGGTGCCTGGAACACTAATTTGCTTTGATCAAAATACATGACCAAGATTTCTGGGAAAAAT
GGGGAGGTTAATGTGCAATTAACAGGCGAAGTCCCTTTAAGATTATCTCTTCATCAAAAAATTCGATATAGTTG
GTAACAGATGGAACCTAGACCGAGAGCAAAACCCGGAGTACAATGTACCATCACAGCCACAGACAGGGGCAAG
CCGCCCTCTCTCCAGCATAAGCGTCTATCTACATATCAGAGACGCTCAACGATAACGCTCCGGTTTTCCACAG
GCGTCTACTTACTGTACGTGTACCCGAAAAACAAACCTCTGGGCGCTCATTCGCGCAAGTCTGGCGCTCGGACCTG
GACTTGGGTTGAACCGCAAGTCTCTACTCTATCATGCGCAGCAGCCTAGAGCCTCTGGCACTTGGCTCTTTAC
GTGTCTATGAGCGAAAGTGGGGTGGTGTTCGCGCAGCGCGCTTTGACTACGAGCAGCTGGCCACTTCGAA
CTCACACTACAGGCCCGCGACCAAGGGCTCGCTCGGCTCAGCGCAACCGTGAGCCTGCGCGTGTGTGGGCGAC
CGAAACGACAACCGCACCGCGGTGTGTATCCCGCGCTGGGTCCGACGGCTCTGCGCTTCTCGATATGGTGCCG
CGCGCTCGAGAGCCCGGCTACTGTGTACCAAGGTAGTGCGCTGGACGACGATCTTGGGCAACACCGCTTGCGTG
TCTTACCAGTGTGTCAGGCTAGCGAGCCCGGGCTCTTACGCTGGGGCTGCGCACAGGAGGTGCGCACAGCG
CGTGCTTGGGCGACAGGAGCGCGGCCCGCGCAGCGCTGCTGGTTGCTGTGCGTATGGTGAGCGACCGCCACT
TCCGCCACCGCCAGCTGCACTTGGTCTTTGCTGACAGCTTGCAAGGAGGTGCTGCGGATATCACTGACCGCCT
GTACCTCTGACCCCCAGCTGAGCTGCAAGTTTACCTAGTGGTGGCTTGGCCTTGATCTCAGTGCTCTTCCCT
CTGGCGGTGATTTCTGGCGCTTGCGCTGCGAGCTCTCCGACCGCTGGAGCTGAGTCTTCCAACT
GGTCTCTGTGTCAAGTCTGGAGCTTGGTTCCCCCAACTACAGTCAGGGGACTTTGGCTTATTCTTACAACCTA
TGTGTTGCACATACAGGAAAGCGGAGTTAATTCTTCAAAATGTAGTGAGCAATGTGATTCAGGACAAGACATA
CTTTTGTGTGATTCATCTGGGGCTTTATTCCACTTTGTAATTCCAGCGAGTGCAGCTTCCATCTCGATGTGCA
GCCCGGCCAACACGAGCTGGCGTTTCTCTAGGCCACAGAGACCGGCAACAGCGGCTCCCAAAATGGCGATGAC
ACCGGCACCTGGCGCTCAACACAGCTTTGACACAGAGATGCTGCAAGCCATCTTGGCGTCCGCGAGTGAAGCT
GCTGATGGGAGCTCCACCTGGGAGGGGTGCGCGCACCATGGGATTGAGCGCCCGCTACCGACCCAGTTACCT
CTGACAGCACTGCCGACTACCGCCAGAAATGTCTACATCCAGGCGAGCAATGCCACACTGACCAACCGAGCTGGC
AAGCGGGATGGCAAGGCCACGAGGTGGCAATGGCAACAGAAAGAAAGGAGGAAGAAATACAGTACAT
GGAGGCGAGGCAAGAGGACACAGGCGGCTCTCCCCAACCGCCAGCTTCTCTTACCTGACCCAGGCGCTCA
GAGTTTCAGGGCTACGCCCAAGAACTACTGTTAGGGGCCAAGGCCATGCTCCCTTGGGAAACAGAAACAGGTGCC
CAGTCAGCACTACCCCTTCCCCCCCCAGGGGTTGAATATGCAAAAGCAGTTCGCTGGGAACCCCATCCAATC
AATCTGCTGTACCATATGGGGTGTAGTGGGGTTACTGTAGACACCAAGAACCTTTGGCACACCCCGTTAGTTACAG
CTGAACCTCTCCATCTTCAAAATCAATCAGGCCCATCCATCCATGCTGCTCCCTCTCCCAACCCCACTCAACAG
TTCTCTTTCCCGAGTAAGGTTGGTTGGGGTGTGAAATACCAAGTAACCTACAGAGCTCTAGTTCTTGAAAGTT
GGAAGGGCATGACTGCTTGGCGCTCTCTTTGATTCTCAATCTTCCCCAAAGAGTGGTTTGGTGGAGCGCCC
TTCACCTCTCTTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGATCACCATCCCATGGTACTGATGC
TTGCTGGATTTAGGGAGGCAATTTGCTACCAAGCCTCTTCCCAACGCGCTGGGAGCAGTCTTCTGTTTGTGTT
TTCATTGTTGACGCTTTCACGTGCTGCTGACTTCCCACTCCCTCTCAAAACAGAGACTCATGCAATGT
TCCAAGACAGTATGGGGTGGTAAGATAAGGAAGGGAAGTGTGTGATGTGGATGGTGGGGGCGATGGCAAAAGCTT

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FIGURE 1760B

GACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCTCAGGGGACTGACAACATCCTCCAGATTCCA
GCCATAAACCAATAACTAGGCTGGACCCCTCCCACTACATAATAGGGCTCAGCCCAGGCAGCCAGCTTTGGGGCTG
AGCTAACAGGACCAATGGATTAACTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCCT
TGAGAGGTCAGAGGGGCCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGTGAAGGGTCAGCGGAGCCCCA
GCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTGGGGAGGCAGGGAGCTAGGGCAGGGACCAAT
GAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTCAACAGGGCCCCTGCCCTCCTGAAGCCTCAGTCTTCACTT
TGCCAGGTGCCGTTTCTCTCCGTGAAGGCCACTGCCAGGTCCCCAGTGCGCCCCCTAGTGGCCATAGCCTGGT
TAAAGTTCGCCAGTGCCCTCCTTGTCATAGACCTTCTTCTCCACCCCCCTTCTGCCCTGGGTCCCCGGCCATCC
AGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCCCCTCCCTCTTTCGGCTGGTGTAGA
ATAGCCAGTAGTGTAGTGCAGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGGCGCGGGCTCCGCGCAGCCGT
CTGTCCITGATCTGCCCGCGCGGCCGCTGTGTGTTTTGTGCTGTGTCCACGCGCTAAGGCGACCCCTCCCCC
GTACTGACTTCTCTATAAGCGCTTCTCTTCGCATAGTCACGTAGCTCCCAACCCACCCCTCTTCTCTGTGTCTCAC
GCAAGTTTTATACCTCTAATATTATATGGCTTTTTTCTTCGACAAAAAATAATAAACGTTTCTTCTGAAAAG
CTG

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FIGURE 1761

MGSGAGELGRAERLPVLFLLSLFCPALCEQIRYRIPEEMPKGSVVGNLATDLGFSVOELPTRKLRSSEKPYF
TVSAESGELLVSSRLDREEICGKKPACALEFEAVAENPLNFYHVNVVEIEDINDHTPKFTQNSFELQISEAQPGT
RFILVEAEDADIGLNSLQKYKLSLNPSPFSLIIEKQDGSKYPELALEKTLDRQQSYHRLVLTALDGGHPPLSGT
TELRIQVTDANDNPPVFNDRVYRVSLRENVPPGTTVLQVSATDQDEGINSEITYSFYRTGQIFSLNSKSGETITQ
KKLDFEETKEYSMVVEGRDGGGLVAQCTVEINIQDENDNSPEVTTFHSLLEMIENAVPGTLIALIKIHDQDSGEN
GEVNCQLQGEVPFKIISSSKNSYKLVTGTLDRQETPEYNVTITATDRGKPPPLSSSISVILHIRDVNDNAPVFHQ
ASYLVSVPENNPPGASIAQVCASDLGLNGQVSYSIMASDLEPLALASYVMSAQSGVVFAQRAFDYEQLRIFE
LTLQARDQGSPPALSANVSLRVLVGDRNDNAPRVLYPALGPDGGSALFDMVPRAAEPGYLVTKVVAVDADSGHNAWL
SYHVLQASEPGLFSLGLRTGEVVRTARALGDRDAARQLLVAVRDGGQPPPLSATATLHLVFADSLQEVLPDITDRP
VPSDPQAELOFYLVVALALISVLFLLAVILAVALLRLRRSSSPAWSCFPGLCVKSGPVVPPNYSQGTLPYSYNL
CVAHTGKTEFNFLLKCSFQLSSGQDILCGDSSGALFPLCNSSESTSHPELQAPPNTDWRFSQAQRPGTSGSQNGDD
TGTWPNNQFDTMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVDPYRQNVYIPGSNATLTNAAG
KRDGKAPAGNGNKKKSGKKEKK

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FIGURE 1762A

ATCGGAGGGAGCTGCGCGCAGAGGCGCCGGCCGGCCCGCGGCAGGTGCTATTTCCCTTTGCTGCTGCCCTTTGTTTC
 TACCCACCTCGAGTGAGCGCATCCGCTACTCGATTCCGGAGGAGCTGGCCAAAGGGCTCGGTGGTGGGGAACCTC
 GCTAAGGATCTAGGCGCTAGTGTCTCGATTGTGTGCGCTCGCAAGCTGCGAGTGAGCGCGGAGAGCTGCACTTC
 AGCGTAGAGCGGGAGAGCGGGGACTTACTTGTGAAGAACCGAATAGACCGTGAGCAAATATGCAAAGAGAGAAGA
 AGATGTGAGTGTCAATTGGAGAGCTGTGGTGGAAATCCTTTAAATATTTTCATGTGATTGTGGTGATTGAGGAT
 GTTAATGACCAAGCCCTCAATTGTATAAAAAGGAAATACATTTAGAAATTTTCGAATCTGCATCCGCTGGTACA
 CGACTATTCGCTTGACCTGCCACGGATCCTGATATAAACATAAACTCAATTAAAGATTATAAGATAAACTCTAAT
 CCTTATTTTTTCAATATGTTAGAGTTAATTCGATGGTGGCAAATACCCAGAGTTATCTCTGGAGAAATCCCTA
 GCGCGGAAGAACAGAGATCTCATAGCTTGATATTGACTGCCCTGGACGGAGGGGACCCACCAAGAAGTGCCACC
 GCTCACATAGAAATTTCTGTCAAGGATACCAATGATAACCCCCGGTTTTTCAGCAGAGACGAATATAGAATTAGT
 CTTAGTGAATAATCGCCCTGGGTCCCTGTGTGTGAAGTGACAGCCACTGACCAGGATGAGGGGTCAATGCT
 GAGATAAACTACTACTTCCGAAGCACTGCCAGAGCAAAAACATATGTTCTCATTGGATGAGAAAACAGGTATG
 ATTAAGAATAACCAAGTCATTTGATTTTGAAGATGTAGAAAGGTACACCATGGAAGTGGAGCGGAAGGACGGAGGT
 GGTCTCTCTACCCAGTGTAAGATAATCATAGAAATCCTTGATGAAACCGACAAACAGCCACAGAAATATCATCACT
 TCTCTCTGTGATCAGATTTTGGAGAAATTCACCTCCAGGAATGGTTGTGCCCTCTTCAAACACGGGATCTGGAT
 TTCGGAGGAAATGCGGAAGTCAGGGTGTAAATATAGAAACAGACATTCATTCAGAAATTTATCTCTTCCAATAAC
 TACTACAAACTGGTGACAGATGGAGCCCTGGACCGAGAGCAGACACCAGAATACAATGTCACTCTGTAGCCACT
 GACAGGGCGAAGCCGCGCTCTTCTTCCAGTAGAAGCATCACCTTGATGTGCGTGACATCAACGACAACGCCCCA
 GTTTTCGACCAAGCGCTCTACGTGGTCCAGTGGCCGAGAACACCCGCGAGGCGCTCCATTGCGCAAGTGAGC
 GCCTCTGACCCGGATTTGGGGCTCAATGGCCACATCTCTACTCTATAGTGGCGAGCGCTAGAGGCCCTGGCG
 GTGTCGTCATACGTGTCASTGAGCCGAGCGCGGGTGGTGTTCGCGCAGCGCGCTTTGATCACGAGACGCTG
 CGCGCTTTCGCGCTCACGCTGTCAGGCCGCGACCAAGGCTCGCCACGCTCAGCGCCAACTGAGCCTGCGCGTG
 TTGTTGGGAGACCGCAATGACAAACGCCACCGCGGGTCTGTACCCAGCTCTGGGTCTGACGGCTCCGCGTTCTTC
 GATATGGTACTCTGCTGAGAGCCCGCTACCTAGTGACTAAGGTGTAGCGGTGGACCGCCGCTCGGGACAC
 AACGCTTGCTGTCTTACCACGTGTGACGGCCATGAGCCCGGACTCTTCAGCCTGGGCTGCGCACTGGGAG
 GTGCGCACGGCTCGAGCCTTAGGCGACAGGGACGACGCCCGCCAGCGCTCTGTTGCTGCTGCTGCTGAGGTGGA
 CAGCCGCACTCTCTGCCACCGCCACGCTTCATCTGGTCTTCGACAGACAACTGCAAGAGATACTGCCAGACCTC
 AGGCAAGCCGCTGTACTCTGACCCCCAGGCTGAATGCAAGTTTACCTGGTGGTGGCTTGGCCCTTAATCTCA
 GTGCTCTTCTCTCTGCGCGTGAATTGCGCAATTGCCTTGGCCTGCGACGCTCTCTCAGCCCTGCTACTTGGGAC
 TGCTTCAATCTGGTCTCTGTGTCAAGTCTGACCTGTAGTTCGCCCAACTACAGTGAGGGGACTTTGCGCTTAT
 TCTTATAATCTGTGCATTCGACATACGGGTACAAAAGAGTTTAAATTTCTTAAATGCAAGTGTCGCCCTACATTC
 AATGAAGACATGGTTTGCAGTGCTTCTCTGGAGCCTTAATTCACCTTAAATGGGAGGAGATTGACTTCACAT
 CCTGAGACTGTGACTTCGCAAGCCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCAGAGACCCGGCAGCAGC
 CTCTCCAAAATGGCGATGACACGGCACCTGGCCCAACACCACTTGTGACAGAGATGCTGCAAGCCATGATC
 TTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCCACCTGGGAGGGGTGCGCGCACCATGGGATTGAGCGCC
 CGCTACGGACCCAGTTCACTCTGACGACGCTGCCGACTACCGCCAGAAATGTCTACATCCAGGCGAGCAATGCC
 ACACCTACCAACGAGCTGGCAAGCGGGATGGCAAGGCCACAGCGTGGCAATGGCAACAGAAGAAATGCTGGCG
 AAGAAGGAGAAGAAGTAACTAGGAGGCCAGGCGAAGGCCACAGGGCGGCGCTCTCCCAACAGCCAGCTCTCTC
 CTTACCTGCACCCAGGCTCAGCTTCCAGGGTAAACCCAGAACTCTGTAAGGGGCGCAGGCCATGCTCTCCCT
 TGGGAACACAGAAACAGTGCCAGTCAGCACCTTACCCCTTCCCCCCCCAGGGGGTGAATATGCAAAAGCAGTTC
 GCTGGGAACCCCAATCCAATCAACTGCTGTACCACTGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTTG
 CCAACCCCGTTTAGTTACAGCTGAATCTCTCATCTTCCAAATCAATAGGCCCATCCATCCATGCCTCCCTC
 CTCGCCACCCCACTCCAACAGTTCCTCTTCCGAGTAAGTGGTGGGGTGTGAAGTACCAAGTAACCTACAA
 GCCTCTAGTTCTGAAAAGTTGGAAGGGCATGACCTCTTGCCCTCTCTCTTCTCAATTTCTTCCCAAA
 GATGGTTTGGTGCCAGCCCTTCACTCTCTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGATCA
 CCATCCCACTGGTACTGATGCTTGTGATTTAGGGAGGGCATTTTGTCAACCAAGCTCTTCCCAAGCGCTGGG
 GACCACTCTTCGTTTTGTGTTTCAATTGTTGACGTTTCACTGACATGCCCTTGACTTCCCACTCCCTCCTCAA
 ACAAGAGACTCCACTGCATGTTCCAAGACAGATATGGGTGTAAGATAAGGAAGGAAGTGTGTGGATGTGGATG

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FIGURE 1762B

GTGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCCTCAGGGGACT
GACAACATCCTCCAGATTCCAGCCATAAACAATAACTAGGCTGGACCCCTCCCACTACATAATAGGGCTCAGCC
CAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACTGGCATTTCAGTCCAAGGAAGCTCGAAGC
AGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGAGGGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGGT
GGAAGGTCAGCGGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTTGGGAGGCAGG
GAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCAGGATGGGGCTTCTTAACAGGGCCCCCTGCCCTCC
TGAAGCCTCAGTCTTACCTTGCCAGGTGCCGTTTCTCTCCGTGAAGGCCACTGCCCAGGTCCCCAGTGCGCC
CCCTAGTGGCCATAGCCTGGTTAAAGTTCCCCAGTGCCCTCCTTGTGCATAGACCTTCTTCCACCCCTTCTG
CCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCCCCT
CCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCCGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGG
CGGCGGGCTCCGCGCAGCCGTCTGTCTTGATCTGCCCGCGCGGCCCGTGTGTGTTTTGTGCTGTGTCCACGC
GCTAAGGCGACCCCTCCCCGTACTGACTTCTCCTATAAGCGCTTCTCTTCGCATAGTCACGTAGCTCCACCC
CACCCTCTTCTGTGTCTCAGCSAAGTTTTATACTCTAATATTTATATGGCTTTTTTCTTCGACAAAAAATAA
TAAACGTTTTCTCTGAAAAGCTG

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FIGURE 1763

MGGSCAQRRRAGPRQVLFP LLPLFYPTLSEPIRYSIPEELAKGSVVG NLA KDLGLSVLDVSARKLRVSAEKLHF
SVDAESGDL LVKNRIDREQICKERRRCELQLEAVVENPLNIFHVIVVIEDVNDHAPQFDKKEIHLEIFESASAGT
RLSLDPATDPDININSIKDYKINSNPYFSLMVRVNSDGGKYPELSLEKLLDREEQRSHSLILTALDGGDPPRSAT
AHIEISVKDINDNPPVFSRDEYRISLSENLP PGSPVLQV TATDQDEGVNAEINYYFRSTAQSTKHMFSLDEKTGM
IKNNQSFDFEDVERYTMEVEAKDGGGLSTQCKVIEILDENDNSPEIIITSLSDQI LENSPPGMVVALFKTRDL
FGNGEVR CN IETDIPFKIYSSNNYKLVTDGALDREQTPEYNVTIVATDRGKPP LSSSR SITLYVADINDNAP
VFDQTSYVVHVAENNP PGASIAQVSASDPDLGLNGHISY SIVASDLEPLAVSSYVSVSAQSGVVFAQRAF DHEQL
RAFALTQARDHGSP T L SANVSLRVLVGD RNDNAPRVLYPALGPDGSAFDMVPRSAEPGYLVTKVVAVDADSGH
NAWLSYHVLQASEPGLFSLGLRTGEVRTARALGORDAARQRLLVAVRDGGQPP L SATATLHLVFADNLQEILPDL
SDRPVLSDPQAE LQFYL VVALALISVLFLLAVILALRLRRSLSPATWDCFHPLGCVKSGPVPPNYSEG TLPY
SYNLCIAHTGTKEFNFLKCSVPLHSNEDMVCSVSPGALIPPHGGEDLTSHPETLSQAPPNTDWRFSQAQRPGTS
GSQNGDDTGTWPNNQFDT EMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNA
TLTNAAGKRDGKAPAGGNGNKKKSGKKEK

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FIGURE 1764A

GCTGCGCAGACCTTGGCCAGCACACCAGATTGCCAGCTCCGAGACCCGGGACTCCTCTGCTCTGGGCCGAATGC
 TCTTTTAGCGCGGTAGAGTGCATTTTCTCCAAGCTGGAAAAAGCGGGGACCCAGCGAGAAACCCGAGCGAACATGGG
 AGGGAGCTGCGCGCAGAGGCGCGGGCCGGCCGCGGAGGTACTATTCTTGGTGTGCCTTTGTTCTACCC
 CACGCTGTGTGAGCCGATCCGCTACTCGATTCCGGAGGAGCTGGCCAAGGGCTCGGTGTGGGGAACCTCGCTAA
 GGATCTAGGGCTTAGTGCTCTGGATGTGTGCGGCTCGCGAGCTGCGAGTGAGCGCGGAGAAAGCTGCATCTCAGCGT
 AGACGCGCAGAGCGGGGACTTACTTGTGAAGGACCGAATAGACCCGTGAGCAAAATATGCAAAAGAGAGAAGAAGT
 TGAGTTGCAATTGGAAAGCTGTGGTGGAAAACTCTTTAAATATTTTTCATGTCATTGTGGTGATTGAGGATGTTAA
 TGACCACGCCCCCTCAATTCGGGAAAGATGAAATAAACTTAGAAATCAGTGAATCCGTCAGCTGGGGATGGGAAC
 AATTCTTGAGTCTGCGAAGATCTCGATATTAGTATGAAATTCGTGAGCAAAATACCAACTAAGTCTTAACGAGTA
 TTTCTCATTGGTGAGAAAAGACAATCCTGATGGTGGCAAAATATCCAGAATTAGTATTGCGAAGACTCTGGACCG
 AGAAACGCGAGAGCGCTCACCCTTGGTACTGACCGCCTTAGATGGTGGGGACCTCCCGAAGCGGTACTGCTCA
 GATAAAGATCCTGGTAATAGATGCCAATGACAACCCCCAGTGTTACGCCAGGACGTGACAGGGTTAGCCTTCG
 GGAAGACGTGCTCCAGGCACCTCCATCCTGAGATGAAGGCCACTGACCAGGAGGAGCATCACTCAGAGAT
 CACTTATTCTCTTTTGGTGTGGCTGACAAAGCTCAGCACGTGTTCTCTCTGATTACACTACAGGAAACATTCT
 AACTCAGCAGGCTTTGGATTTTGAAGAAGTAGAAAGATATACGATAAATAGAAAGCAAAAGACCGAGGATCTCT
 CTCAACACGGGTGAAGTAAATGTTGAAGATTGTAGACGAAACGCAACGACCCAGCAAAATATCATCAGTCAT
 CTCGTATCAGATTATGGAGGATTCCCTCCAGGATGGTGTGTCCTCTTCAAACACGGGACCAAGACTCAGG
 GGAAGATGGGGAAGTCAGGTGTAGCTTAAAGTAGAGGTGTTCCATTAAAGATTCACTTCTTCTATAAATTACTA
 CAAGCTAGTAAACAGATGAGGCCCTGGATCGGAGCAGACCCAGATACAACGTACCAATCGCAGCCACAGACAG
 GGGCAAGCTCCGGTTATCTCCAGCAAAACCATACCTGCACATTACTGACGTCAATGACAAGCGCGGGTTT
 CGGCAAGCTCAGCCTACTCGTCCAGCTGCCAGAAACCAACGCGGGTGCTCCATAGCGCAAGTCAAGTGCTC
 TGACCCAGACTTCGGGCTCAACGGCCGTGTCCTCTACTCTCTCATTGCCAGCGACCTGGAGTCACGAACGCTGTC
 GTCTCTACGTGTCTGAGCGCGCAGAGCGGGGTGGTGTTCGCGCAGCGCGCTTCGACACGAGCAGCTGCGCAC
 CTTCAGCTCAGCTCAGCGCCCGGACCGAGCGGCTCGCCCGCGCTCAGCGCCAATGTGAGCTTCGCGTGTGGT
 GGGCAGCCGTAAACGACAACGCAACGCGGGGTGCTGTACCCTGCGCTGGGTCCCGACGGCTCCGCGCTCTTCGACAC
 AGTGCGCGGGCGCGCAGCAGGCTACCTGGTGACCAAGTGGTGGCGCTGGAACGCGGACTCGGGGCAAAATGC
 CTGGCTGTCTTACCAGTGGTGCAGGCCAGTGAGCCCGGGCTCTTCAGCCTGGGGCTGCGAACAGGCGAGGTGCG
 CATGGTGGCTGCTTGGGTGACAAGGACTCGGTCCGCCACGCGCTGCTAGTCGCTTAAGAGAGTGAAGGACAGCC
 ACCCTTTTCAGCCACTGACCGCTGCACCTGGTGTTCGCAGATAGCTTGCAAGAGTACTGCGGGATTTCAGCGA
 CCATCCACACCTCTGACTCCAGGCTGAGATGCAGTTTACCTGGTGGTGGCCTTGCCCTTGATTCTGTGCTGT
 CTTTCTCTCGCGGTATTCTAGCTATTGCTCTACGCTTCGCACAGTCTTTCAGCCCTACTGCAAGAGAGTGCTT
 TGAGTCAGTTCTCTGCTCCAGCTCCGACCTGGGCTCCCCCAACTCAGCTGAGGGAACGTTGCCCTATGCCCTA
 TAAATTTTGTGTGCTGGGGATCAAAATGAATCCAGAAATTAATTTTTCACATCTGTTGATCATTGTCAGCCAC
 ACAAGATAACTCAAAAGATAGCATGCTACTGGCTAGCATTTTAACTCCAGCGCTGAAGCAGATAAGAAGAT
 TCTTAAACAGCAAGCCCCGCCAACACGGACTGGCGTTTCTCTCAGGCCAGAGACCGGGACACCGGCTCCCA
 AAATGGCGATGACACCGGCACCTGGCCCAACACCAAGTTTGAACACAGAGATGCTGCAAGCATGATCTTGGGCTC
 CGCCAGTGAAGCTGTGATGGGAGCTCCACCTCGGAGGGGCTCGCGGCAACTGGGATTGAGCGCGGCTACGG
 ACCCGAGTTACCTCGCAGCAGCTGCGCCGACTACCGCCAGAATGTCTACATCCAGGACGCAATGGCACACTGAC
 CAACGAGCTGGCAAGCGGGATGCAAGGCCCAAGCAGGTTGGCAATGGCAACAGAAGAATCGGGCAAGAAGGA
 GAAGAAGTAAATGAGGCGAGGCCAAGGCCACAGGGCGGCTCTCCCAACACGCCAGCTTCTCCTTACCTG
 CACCCAGGCTCAGAGTTTCAGGGCTAACCCCAAGAACTGGTAGGGGCCAAGGCCATGCTCCCTTTGGGAAC
 AGAAACAAGTGCCCAAGTCAGCACTACCTCTCCCGCCAGGGGGTTGAATATGCAAAAGCAGTTCGGCTGGGA
 CCCCCATCCAAATCACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCAATTTGGCCACACCC
 CGTTTATGTTACAGCTGAACCTCTCTCATCTTCCAAATCAATCAGGCCCATCCATGCTCCTCTCTCCAC
 CCCACTCCAACAGTTCTCTTTCCGAGTAAGGTGGTGGGGTGTGAAGTACCAAGTACCTACAAGCTCCTA
 GTTCTGAAAGGTTGGAAGGGCATGATGACCTCTTGCGCTCTCCTTTGAATTTCTCAATCTTCCCCCAAGCATGGTT
 TGGTGCCAGGCTCTCACTCCCTTCCCTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGATCACCATCCC
 ATGGTACTGATGCTTGTGGATTATGGGAGGGCATTGTGCTACCAAGCCTCTTCCCAACGCGCTGGGGACCACTG

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FIGURE 1764B

TTCGTITTTGTTTTTCATTGTTTGACGTTTCCTGTCATGCCCTTGACTTCCCCACCTCCTCCTCAAACAAGAGA
CTCCACTGCATGTTCCAAGACAGTATGGGGTGGTAAGATAAGGAAGGGAAGTGTGTGGATGTGGATGGTGGGGGC
ATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCTCAGGGGACTGACAACAT
CCTCCAGATTCCAGCCATAAACCAATAACTAGGCTGGACCTTCCCCTACATAATAGGGCTCAGCCAGGCAGC
CAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACTGGCAITTCAGTCCAAGGAAGCTCGAAGCAGGTTTAG
GACCAGTCCCCCTTGAGAGGTCAGAGGGGCCCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGTGGAAGGGT
CAGCGGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCCCTGGGTGGGAGGCGAGGGAGCTAGG
GCAGGGACCAAAATGAACAGAAAGTCTCAGCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCCCTCCTGAAGCCT
CAGTCTTTCACCTTGCCAGGTGCCGTTTCTCTCCGTGAAGGCCACTGCCAGGTCCCCAGTGCGCCCTTAGTG
GCCATAGCCTGGTTAAAGTTCCCCAGTGCCCTCCTTGTGCATAGACCTTCTTCTCCACCCCTTCTGCCCTGGG
TCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCCCCTCCCTCTTT
CGGCTGGTGTAGAAATAGCCAGTAGTGTAGTGGGTGTGCTTTTACGTGATGGCGGGTGGCGAGCGGGCGGCGGGC
TCCGCGCAGCCGTCTGTCTTGATCTGCCGCGGGCGGCCGTGTTGTGTTTTGTGCTGTGTCCACGGCTAAGGC
GACCCCCCTCCCCGTACTGACTTCTCCTATAAGCGCTTCTTTCGCATAGTCAGTAGCTCCACCCCCACCTCT
TCTGTGTCTCAGCGAAGTTTATACCTCTAATATTATATAGCCTTTTTTCTTCGCAAAAAAATAATAAACGT
TTCTTCTGAAAAGCTG

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FIGURE 1765

MGGSCAQRRRAGPRQVLFP LLPLFYPTLCEPIRYSIPEELAKGSVVG NLAKDLGLSVLDVSARELRVSAEKLHF
SVDAQSGDLLVKDRIDREQICKERRRCELQLEAVVENPLNIFHVIVVIEDVNDHAPQFRKDEINLEISESVSLGM
GTILES AEDPDISMNSLSKYQLSPNEYFSLVEKDNDPGGKYPELV LQKTL DRETQSAHHLVLTALDGGDPPRSGT
AQIRILVIDANDNPPVFSQDVYRVSLREDVPPGTSILRVKATDQDEGINSEITYSFFGVADKAQHVS LDYTTGN
ILTQQPLDFEEVERYTINIEAKDRGSLSTRCKVIVEVVDENDNSPEIIITSLSDQIMEDSPPGVVVALFKTRDQD
SGENGEVRCSLSRGVFPFKIHSSSNYYKLVTDEALDREQTPEYNVTIAATDRGKPP LSSSKTITLHITDVNDNAP
VFGQSAYLVHVPENNQPGASIAQVSA SDP DFG LNGRVSYS LIASDLESRTLSSYVSVAQSGVVFAQRAFDHEQL
RTFELTLQARDQGS PALSANVSLRVLVGDRNDNAPRVLYPALGPDGSALFDTVPRAAQPGYLVTKVVAVDADSGH
NAWLSYHVQASEPGLFSLGLRTGEVRMVRLGDKDSVRQRLLVAVRDGGQPPLSATATLHLVFADSLQEVLDPDF
SDHPTP SDSQAEMQFYLVVALALISVLFLAVILAIALRLRQSFSP TAGD CFESVLC SKSGPVGPPNYSEGTLPY
AYNFCVPGDQMNPEFNFTSVDHCPATQDNLNKDSMLLASILTPSVEADKKILKQQAPPNTDWRFSQAQRP GTSG
SQNGDDTGTWPNNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNAT
LTNAAGKRDKAPAGGNGNKKKSGKKEKK

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FIGURE 1766A

ATGCTCCGCAAGGTGAGAAGCTGGACAGAAATCTGGCGGTGGGCTACCCCTTTTGTTCCCTCTTTTACCACCTGGGT
TACGTTTGTGGGCAGATGCGCTACCCGGTCCCAGAGGAGTCAAGGAAGGACATTTTGTAGGGAATGTCGCTCAA
GATTTCTCGTGGATACGACAGCTCTGTACGCTTCGACGGCTGCAGGTGCAAGTTCGAGAGGGTGAACCAAGACACTTC
CGTGTGGATTTTGACACAGCGGAGCCCTGCTCATCAAGAACCCAAATCGACCGAGAGGCACTGTGTGGGCTCAGTGCC
AGCTGCATCGTGGCCCTGTGAGTTTGTACCGAAGGTCCTTTTGGAAATGTACCAGCAGAGGTTAGAGATCGTAGAT
GTGATGTATCACGCCCCCGCTTTTCCCGGCAGCAGCTGGACTTGGAAATTTGGGAGGGCAGCTCCCTCCAGGACAG
CGTTTCCCGTTGGAAAAGGCTCAGGATGCAGATGTGGGGAGCAATTTCATTAGCAGCTATAGGCTGAGCTCCAAT
GAACACTTTGCACTGGATGTGAAGAACGCGACGACGGCAGCTGGTCCAGAGCTGCTCCTGGAGAAGCCTTTG
GATCGAGAGAAGCAATCGGACTACCGCTGGTGTGCTGACTGCTGTGATGGAGGGAACCCGCGAGATCTGGCACC
GCAGAGCTCCGGGTATCCGTGCTGGACGTAAACGACAACGCCCCAGCCTTCACGACATCCAGCTACAGGATTAGT
GTGTTGGAGAGCGCACCGAGGGCAGTGGTGTCTATCCAGCTCAATGCCTCAGACCCGACCTGGGTCCCAAGTGGT
AACGTACACCTTTTATTTCAGTGGTCATACCCCTGATCGGTGAAGAAACCTCTTTAGCCTGCACCCCACTATCGGA
AAGCTTACTCTTTTGGGGCCCTAGACCTTGAGAGTGAGAATTAATGAAATTTGATGTGCGGGCTCGCGATGGG
GGTTCTCCAGCCATGGAGCAACATTCGAGCCTTTCAGTGGATCTGCTGGAGCTAAATGACAATGCCCTTACATC
ACAGTGACCTCAGAGCTTGAACCCCTCCCGAGAGTGCAGAACCTGGCACTGTGGTGGCACTTATCAGTGTGCAG
GCTCAGACTACGGGTCAACAGGGCAGTGTGAGCTTCGCAATTCCTGACCACTTGCCATTGGCCTCAAGTCTGGCC
TTCAGGAACCACTTCTCCTGTGTGACTGTGGAACCTTGGATCGAGAGGCCAAATATAGCTATGACATCATGGTC
ACTGCTTCTGATGCTGGGAACCCCTCCTCTCAGTACCCACAGAACTATTTTCTCAATATTTTCAGATGTGAATGAT
AATCCACCTCTTTCTTTCAGAGGTACATGAGGTGTTTGTCTCGAGAACAATCGCCAGGGGACCTGCTTTGCT
TCCCTTGCAGCTCTACCCAGCACTGTGGCTTGAATGCGCTTATCTCCTACTCACTCCTGTGAGGCCAGGAATCGA
GATGTATCAGCTTCTCTTTCTACTCTCTGAACCCCGACAGGAGCTGTTCATGTACTCTGATCCTTTGACTAT
GAGCAAAACCCAGACACTGCAGTTTGAAGTGCAGGCCCGGGATCGGGCAACCCACCCCTTAGCAGCACTGTAAACA
GTTCTGTATTTGTGCTGGACCTCAATGACAATGCTCCAGCTGTGCTCCGTCTCTGGGCCCCGGCTGGTTCCTTA
TGCCCCAAGCACTCGCTCAGTTGGTGTGCTGCCCCACCTAATCACAAGGTGACTGCTGTGGACTTGGATTCA
GGTTACAATGCTTGGGTTTCTTATCAGCTCCTGGAGGCCCCAGATCCCAGCCTGTTTGCACTTCTCGATATGCT
GGGGAGGTGCGGACGGCTGTTCTATCCAGCTGACCTCCACCAACAAGCTGGTCAATTTGGTAAAGGATAGT
GGTAGTCCACCACTCTCTCACTCTGTTACTCTCTTAGTGTCTTAGAGGAAGACACTCATCCAGTTGTGCCAGAT
CTTCGAGAACTCTCAGCTCCAAGGGAAGGAGAATCTCGCTAACCCTCTACTTGGCTGTGTCCCTAGTGGCAATT
TGCTTTGTCTCCTTTGGCTCATTCTGTGGCACTACTCTAAGTGTCTTCGTGGGGCAGCCTGTGGAGTCACTATC
TTTCTGTCTGGCACCCTGTGCTGTCTCACCAGATCTCGAAGGAGGGAGGGGCTTCCCCCTTCCAATGGGATCTCT
CGAATCCAGCTAGGGTCAGATGACCTTCAAGTTTGTGATGTGGAGGCCACTCTATGCTGTATACCCGTTGACCCCTG
GGTTCTGCACCACTCTCGGAGTGAAGTCTCATGATGTGGTGAAGTCAACCCAGTGACCACTATGGCAGGGGAGCCTGTT
CGCCCCAAGCTGCCACCCCTGTATCTTCTCTATGGGCTAGAGCAAGCCCGGCCAACCGGACATGGCGTTTCTCT
CAGGCCAGAGACCCGCTCAGCGGCTCCCAAATGGCGATGACACAGGCTGACCCCTGCCCCAAACACAGTTTGCAC
ACAGAGATGCTCAAGCCATGATCTTGGCGTCCGCGAGTGAAGCTGCTGATGGGAGCTCCACCTTGGGAGGGGGT
GCGGCGACCACTGGGATTGAGCGCCCGCTACGGACCCCACTTCACCTGCGACAGCTGCCGACATACCGCCAGAAT
GCTACATCCAGCAGCAACTGCACTGACCAACGCACTGCGCAAGCGGAGTGGCAAGGCGGATGGCAAGGCGGACAGGTGGC
AATGGCAACAAGAAGAAGTGGGCAAGAAGGAGAAGAAGTAAATGAGGCGCAGGCCAAGAGCCACAGGGCGGGC
TCTCCCCAACCAAGCTAGTTCTCTTCTTACCTGCAACCGCCAGGCTCAGAGTTTTCAGGGCTAACCCCCAGAATCTGG
TAGGGGCCAAGGCCATGCTCCCTTGGGAAACAGAAACAAGTGCCAGTCAGCACTACCCCTTCCCCCCCAGGG
GGTTGAATATGCAAAAGCAGTTTCGCTGGGAACCCCAATCCAATCACTGCTGTACCCATGGGGTAGTGGGGTT
ACTGTAGACACCAAGAACATGTCACACCCCGTTTATGTTACAGCTGAACCTCCCTCATCTTCCAAATCAATCAG
GCCATCAGTACCAATGCTTCCCTCTCCACCCCACTCCAACAGTCTCTCTTCCCGAGTAAGGTTGGTGGGGT
GTTGAAGTACCAAGTAACTCAACGCTCTGATTTCTGAAAAGTTGGAAGGGCATATGACCTCTTGGGCTCTCTC
TTTGATTTCTCAATCTTCCCCAAAGCATGGTTTGGTGCCAGCCCTTCACTCTCTCCAGAGCCCAAGATCAATG
CTCAAGTTTGGAGGACATGATACCAATCCCATGGTACTGATGCTTGTGGATTTTAGGAGGGGCAATTTTGTCTAC
CAAGCCTTCTCCCAACGCCCTGGGGACCACTTCTGTTTTCATGTTGAGCTGTTTCACTGATGCTGATGCGCT
TGACTTCCCCCACTCTCTCTCAACAAGAGACTCCATGCTATGTCCAAGACAGTATGGGGTGGTAAGATAAGG

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FIGURE 1766B

AAGGGAAGTGTGTGGATGTGGATGGTGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGA
GGCTCTGTATGTCTCAGGGGACTGACAACATCCTCCAGATTCAGCCATAAACCAATAACTAGGCTGGACCCCTT
CCCACTACATAATAGGGCTCAGCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACTGGCA
TTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGAGGGGCCCTCTGTGGGTGCT
GGGTACTCCAGAGGTGCCACTGGTGGAAAGGTCAGCGGAGCCCGCAGCAGGAAGGTTGGGCCAGCCAGGCCATTCT
TAGTCCCTGGGTGGGGAGGCAGGGAGCTAGGGCAGGGACCAATGAACAGAAAGTCTCAGCCAGGATGGGGCT
TCTTCAACAGGGCCCTGCCCTCCTGAAGCCTCAGTCCTTCACTTGCCAGGTGCCGTTTCTCTTCCGTGAAGGC
CACTGCCCAGGTCGCCAGTGGCCCCCTAGTGGCCATAGCCTGGTTAAAGTTCCCGAGTGCCCTCTTGTGTCATAG
ACCTTCTTCTCCACCCCTTCTGCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGC
CCTTACAGTAGTGTAGCGCCCCCTCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGCAGGTGTCTTT
ACGTGATGGCGGGTGGGCAGCGGGCGCGGGCTCCGCGCAGCCGTCTGTCTTGATCTGCCGCGGGCGGCCGTG
TTGTGTTTTGTGCTGTGTCCACGCGCTAAGGCGACCCCTCCCCCGTACTGACTTCTCCTATAAGCGCTTCTCTT
CGCATAGTCAGTAGTCCCACCCACCCTTCTCTGTGTCTCACGCAAGTTTTATACTCTAATATTTATATGGC
TTTTTTTCTTCGACAAAAAATAAAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1767

MLRKVRSWTEIWRWATLLFLFYHLGYVCGQIRYPVPEESQEGTFVGNVAQDFLLDTSLSARRLQVAGEVNQRHF
RVDLD SGALLIKNPIDREALCGLSASCIVPLEFVTEGPLEMYRAEVEIVDNDHAPRFPQQQLDLEIGEAAPPQQ
RFPLEKAQDADVGSNSISSYRLSSNEHFALDVKKRSDGSLVPELLLEKPLDREKQSDYRLVLTAVDGGNPPRSQT
AELRVSVLDVNDNAPAFQQSSYRISVLESAPAGMVLIIQLNASDPDLGPPSGNVTFFYFSGHTPDVRVNLFSLHPTTG
KLTLGLPLDFESENIYEFDVRRDGGSPAMEQHCSLRVDLDDVNDNAPYITVTSELGTLPEAEPTVVALISVQ
DPDSSGNGDVSLRIPDHLFPALKSAFRNQFSLVTAGPLDREAKSSYD IMVTASDAGNPPLSTHRTIFLNI SDVND
NPPSFFQRSHEVFPVENNRPDDLCSLAASDPDPSGLNALISYSLLPEPRNRDVSASSFISLNPQTGAHVHATRSFDY
EQTQTLQFEVQARDRGNNPPLSSSTVTVRLFVLDLNDNAPAVLRPRARPGSLCPQALPPSVGAGHLITKVTAVDLD
GYNWVSYQLLEAPDPSLFAVSRVAGEVRTAVPIPADLPPQKLVI VVKDSGSPPLSTSVILLVLEEDTHPVVPD
LRESSAPREGESRLTLYLAVSLVAICFVSFGS FVALLSKCLRGACGVTCFFAGTCACLTRSRRRREGLPPSNGIL
RIQLGSDDPPIKFVDVGGHSHGCTPLASAPTRSDSFMVKS P S APMAGEPVRPSCPPSDLLYGLEQAPPNTDWRFS
QAQRPGTSGSQNGDDTGTWPNNQFDIEMQLAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQN
VYIPGSNATLTNAAGKRDGKAPAGGNGNKKSGKKEKK

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FIGURE 1768A

ATGGGGCCCAAGACACTCCACAGCTCGCTGGGAAATGGCAAGTGTCTGTGATGTTTGCTTGTGCTGCTGGGGC
TGGGTGTCTGGGGCAGCTTCGTACTCAGTGGTGGAGGAGTCTGAGCCGGGGACGCTGGTGGGGGAATGGTGTCTCAG
GATCTGGGCTTAAAGATGACAGATCTGTTGAGCCGGCGGCTGCAATTGGGCTCTGAGGAGAATGGGCGCTATTTT
TCCCTGAGCTTGATGAGTGGTCCCTGGCAGTGAATCAAAGATTGACCGAGAAAGCCTATGTGGAGCCAGCACC
AGCTGCCTGTGCGAGTCGAGGTGGTGACTGAACACCCCTGGAGCTAATCCGTGTAGAGGTAGATCTCTGGAT
CTCAATGACAACTCTCTAGTTTGGCCACCCCTGAGCGAGAGATGCGCATCTCAGAATCAGCAGCATCTGGGGCA
CGATTCCCACTGGACAGTGGCCAGGATCCGATGTGGGCAACAACTACTGTGAGCTTTTACACTCTAAGCCCCAAC
AGCCACTTCTCTGAAATGTGAAGACCTTAAAGATGGGAAGCCATTCACAGAGCTGGTGTAGAGCAGCAGCTG
GATCGTGAAGCCCAAGACATCAGCTGGTGTCTTACTGCTGTGGATGGGGGACCCAGCCCGCTCAGGGACC
ACCCCTATCTCTGTCTATCGTGTGGACATCAATGATAATGCTCCAACCTTCCAATCCTCAGTTCTACGTGTGGGA
ATCCAGAGAATGCACCAATTGGTACTTGTCTGCTCCGCTCAATGCCACTGTATCCAGCAGGGGACCAACGGC
CAACTAGACTATTCTTTGGAGACCACACATCTGAGGAGTGGGGAACCTCTTTGGCTAGACCTTAGCAGTGGG
GCAATCCATGTGTGGGTCCCATAGACTTTGAGGAGTACGTTTCTATGAAATTCATGCAAGAGCCCTGACCCAG
GGACAGCTGCCATGGAGGGCCACTGTGTATTCAAGTGGATGTGGGGATGTCAATGACAATGCCCCAGAGGTG
CTATTGGCTCTTTGGCCAAACCTGTCTTAGAGACACACAGTGGGACAGTAGTGGGGTTGTTAATGTGGCA
GACCGGCTCAGGTGAAATGGTGAAGTGAGCTTGTATATCTCTCCGACCTGCCATTTACAGATTAAAGCTTCT
GAGAACCCTACTCGTGTCTAACCAGCCAGCTTTGGACCGGGAGGCCACATCCCACTATATCATCGAGCTGTCT
GCCAGCGATGCTGGTTTCACTTCCCTACACAAACATCTCACCATCAGGCTCAACATTTCAAGTGTCAATGACAAT
GCACCCGCTTCAACCAGCAGCTTTACACTGCTTACATCTAGAAAACCGGCTCCGGGCTCCCTTCTTGTCACT
GTGGTGTCTCAGATCCAGACAGCTGGGATAATGCCCGCTCACTACTCATTGTAGGAATCAGGTTTCAGGGA
GCCCGAGCTCCCTTTGTGTATGTCAACCAGAGGATGGACGGATCTTTGGCCAGGCTACCTTTGACTATGAA
TTGCTGCAGATGTGAGATTTGGTGGGGGTTGAGACTCGGCTCTCCCAATTGATGCCAACACATCTCTGT
CATGTGTTTGTCTAGACGAGAATGATAATGCCAGCTGTGCTGCACCCACGGCCAGACTGGGAACACTCAGCC
CCCCAGGCTCTCCCTGCTCTGCTCCTCTGCTCTTGTGTACCAAGGTGACAGCCGTGGATGCTGATGCAGCG
CACAATGCGTGGCTCTCTCACTCACTGTTGCCACAGTCCACAGCCCAAGGACTGTTCCTCGTGTCTACACACACT
GGTGAAGTGGCAGCCAGCCGGGCTTACTGGAGGATGACTCTGACACCCAGCAGGTGGTGGTCTGCTGGAGGAC
AATGGTGACCTTCACTCTCTCCACAGCCACAGTGTGCTGGTCTGAGGATGAGGACCTGAGGAATGCC
AAATCCAGTGACTTCTCTATACACCTCTCTGAGCGTTTCAGACCTTACCTTTTACCTCATTGTGGCTCAGCGACC
GTCACTCTCTTATCCCTAGTCACTTCACTCTTCTGTCAAGGAGTGCCTTCAGGGAAACGACAGACGGGACGGG
GGTGGAGGGCAGTGTGACAGCGCCAGGACTCACCCTCCCGGACTTCTATAAGCAGTCCAGCCCAACCTGAC
GTGAGCTCGGACGGCAGCTCAAGTACATGGAGGTGACGCTCGGCCACAGACTCGCAGGACACTGCTACAGG
ACGCTGCTTTTCAACGGCTTCGAGCGGAGCTGACTTCACTTTTCTAAGACCCCTCAGCGTTTCAGACGCCACAGT
CTGGCGCTGGAGCCTGACGCCATCCGCTCCGCTCTAATACGCTCGGGAGCGGGAGCCAGCAAGCCCGGCCAAC
ACCGAGCTGGGCTTCTCTCAGCGCCAGAGACCAGGACCGGCTCCGAGGCTGACACAGGCACTGAGG
CCCAACAACAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCGACTGAAGCTGCTGATGGGAGC
TCCACCTTGGGAGGGGGTCCGGCCACCATGGGATTGAGCGCCCGCTACGAGCCCACTGTTCAACCTGACGACGCT
CCGCACTACCGCAGAGTGTCTACATCCAGGACAGCAATGCCACACTGACCAACGACGCTGGCAAGCGGATGGC
AAGGCCCAAGCAGGTGGCAATGGCAACAAGAGAAGTGGGGCAAGAAGGAGAAGTAACTAGGAGGCCAGGCC
AAGAGCCACAGGCGGCTCTCCCAACAGCCAGCTTCTCTTACCTGACCCAGGCTCAGGATTTTTCAGGCT
TAACCCCAAGAACTGTTAGGGGCCAAGGCCATGCTCCCTTTGGGAAACAGAAACAGTGCCTGACGACGCT
ACCCCTTCCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCATCAATCAACTGCTGTACC
CATGGGGTAGTGGGATGTGCTACATCCAGGACAGCAATGCCACCCCGTTTATGTTACAGCTGAACCTCTCC
ATCTTCAAACTCAATCAGGCGCACTCCATCCATGCTCTCTCTCCCAACCCCACTCAACAGTTCTCTCTTCCC
GAGTAAGGTGGTGGGGTGAAGTACCAAGTAACTACAAGCTCCTAGTTCTGAGAAAGTGGAAAGGACATCA
TGACCTCTTGGCTCTCTTTGATTCTCAATCTTCCCCAAAGCATGTTTGTGTCCAGCCCTTCAAGCTCTCT
CAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGATCACCATCCCCATGGTACTGATGCTGTCTGATTTA
GGGAGGGCAATTTGCTACCAAGCTCTTCCCAAGCCCTGGGACGAGTCTTGTGTTTCTTTTCACTGTTTGA
CGTTTCCACTGCATGCTTGAATCTCCCCACCTCTCTCTCAAACAGAGACTCCACTGCTGTTTCAACAGCAGTA

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FIGURE 1768B

TGGGGTGGTAAGATAAGGAAGGGAAGTGTGTGGATGTGGATGGTGGGGGCATGGACAAAGCTTGACACATCAAGT
TATCAAGGCCTTGGAGGAGGCTCTGTATGTCTCAGGGGACTGACAACATCCTCCAGATTCCAGCCATAAACCAA
TAACTAGGCTGGACCTTCCCACTACATAATAGGGCTCAGCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGAC
CAATGGATTAAACTGGCATTTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAGGTCCCCTTGAGAGGTCAGA
GGGGCCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGSGTGAAGGGTCAGCGGAGCCCCAGCAGGAAGGGTG
GGCCAGCCAGGCCATTCTTAGTCCCTGGGTTGGGGAGGCAGGGAGCTAGGGCAGGGACCAAAATGAACAGAAAAGTC
TCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCCTGCCCTCCTGAAGCCTCAGTCCCTCACCTTGCCAGGTGCCG
TTTCTCTTCCGTGAAGGCCACTGCCAGGTCCCCAGTGCGCCCCCTAGTGCCCATAGCCTGGTTAAAGTTCCCCA
GTGCTCCTTTGTGCATAGACCTTCTTCTCCCACCCCCTTCTGCCCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCC
AGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCCCCCTCCCTCTTTGCGCTGGTGTAGAATAGCCAGTAGT
GTAGTGCGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGGCGGCGGGCTCCGCGCAGCCGTCTGTCTTGATC
TGCCCCGCGGCGGCCGTGTGTGTTTTGTGCTGTGTCCACGCGCTAAGGCGACCCCTCCCCCGTACTGACTTCT
CCTATAAGCGCTTCTCTTCGCATAGTCACGTAGCTCCACCCCCACCTCTTCTGTGTCTCACGCAAGTTTTATA
CTCTAATATTATATGGCTTTTTTCTTCGACAAAAAATAATAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1769

MGPKTLPLAGKQVLCMLSLCCWGWVSGQLRYSVVEESEPGLVGNVAQDLGLKMTDLLSRRLQLGSENGRYF
SLSLMSGALAVNQKIDRESLCGASTSCLLPVQVVEHPLELIRVEVEILDNDNNSPFSATPEREMRISESAASGA
RFPLDSAQDPDVGNTVTSFYTLSPNSHFSLNVKTLKDGKFPPELVLEQQLDREAQARHQLVLTAVDGGTPARSGT
TLISVIVLNDINDNAPTFQSSVLRVGIPENAPIGITLLRLNATDPDEGTNGQLDYSFGDHTSEAVRNLFGLDPSG
AIHVLGPIDFEESRFYIEIHARARDQGQPAMEGHCVIQVDVGDVNDNAPEVLLASLANPVLESTPVGTVVGLFNVR
DRDSGRNGEVSLDISPDLPFQIKPSENHYSLTSPQLDREATSHYIEELLASDAGSPSLHKHLTI RLNI SDVNDN
APRFNQQLYTAYILENRP PGSLLCIVAASDPDTGDNARLTYSIVGNQVQGAPASSFVYVNPEDGRIFAQRTFDYE
LLQMLQIVVGVRDSCGSPPLHANTSLHVFVLDENDNAPAVLHFRPDWEHSAPQRLFRSAPPGSLVTKVTAVDADAG
HNAWLSYSLLPQSTAPGLFLVSTHTGEVRTARALLEDDSDIQVVVLVRDNGDPSLSSTATVLLVLEDEDPEEMP
KSSDFLIHPPERSDLTLYLIVALATVSLLSLVTFFLSAKCLQGNADGDDGGGQCCRRQDSSPDPFYKQSSPNLQ
VSSDGLIKYMEVTLRPIDSQSHCYRTCFSASDGSDFTLRLPLSVQOPTALALEPDAIRSRNTLRRERSQQAPPN
TDWRFSSQAQRPGTSGSQNGDDTGTWPNNQPDTEMLQAMILASASEADGSSTLGGGAGTMGLSARYGPQFTLQHV
PDYRQNVYIPGSNATLTNAAGKRDKAPAGGNGNKKKSGKKEK

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FIGURE 1770A

TTTCATCTGTACCTTTTCAAGTATTCAAATAGAAAAATATAAAACATGTAATAAATAGCAAAACAATGTAATATC
TCATAAAACATGCAATGGTAAAGCATTATCCTATTGAAATTCACAATTTTTATTGAAAAATATTATCGCATGT
TAATTCAGTGGCATTTAGAGAAATATTTAAAGCAACAACCTCTATAGAAAGCTGTGAAATGATTAAATGATTAGTGT
TAAACCAAAATAAAACAATTTCTGAGTCAGTCATCTCCAGTAGGTCATTTTAGTCTCAAGATAAATCTATTCTGT
GTGCAACTGAAGTCTCTTAGTTATTGTTAGTATATATTGGAGACATTTACATAAAGCTTTAGACGCAAAATGGGA
AATGAAGTATCTGATTTTTTTTAAAGCAAAATGATTTCGAGAAATGTGAGTAATTTAATCCGATGCTACAATCT
GATCATTTCTGATCTAATCTGATCATTTAATAACACTAAATAAAACCTTCATCTCACATTTCTTTGGCTGTTCTTT
TAAATATGGGTTTACGGATATAATCAAATAAATTTCAAAACAAAGTAATAAGCAAAATGATTTTTTTTCTCGATAA
TCTAGTAGAGTATTACATTTAGAAGTAATCTGTATCTCAGTCAGTAACATATTAGGACTGTGAAGCGCGCTGTT
CACCCTACTGGAAGACAAATGCAACCGAAAAACACTCAGATCTCACACCTCACGAAGACCCGAGATGCCACAAT
AATCTGTGGACTGCAGCGAAACCCGACCCCTGTTTGGAGGCACTCCAGGTTTCCGGAGGATTGTCATCTCCATAG
CTGCGGCAAGAAACTAAATAAGACCCATTATGACAGTGAAGATCTGAGAGGATTTCTGCAGCAAAACAACAT
GGCCGCTCCACAGAGTCGCCCCAGACGCGGCGAGCTGATCTGCTGTGCGCGCTGCTGGGAACGCTGTGGGAAAT
CGGGAGGGGACAGATTCGCTACTCTGTGCGAGAAGAGACGGACAAGGCTCCTTCGTGGGTAATATCTCCAAGGA
CCTGGGGCTGGACCCCGGAAGCTGGCGAAGCAGGAGTCCGATCTGCTCTCCAGAGGTAGGACCGAGCTCTTTGG
TCTGAACCCGCGCAGCGAGGCTGATACACCGGCGCAGGATAGATCGGGGAGAGCTCTCGCTCAGAGCCGGG
GTGCTGTATAAATATTAACACCTCGGTTGAGGATAAAGAAAACCTCTTTGGGGTAGAAATAGAAATATGTATAT
TAACGATAATAACCCAAAATTTCCAGGTCGAAGATCTAGAAGTAAAAATTAAGCAAACTCGCGGTTCTGGAGCAG
TTATCCACTCCCAAGAGCTGTTGACCCGGATGTGGCGGTGAACCTCCCTCCAGAGCTACCAGCTCAGCCCCAATCA
CAACTTCTCCTGGAGCTGCAGACTGGAGACAATGGAGCCATAAACCCAGAGCTGGTGCTGGAGCGCGCCCTTGA
CAGGGAGGAAGAGCTGCTCAACCTCAGCTGCTCAGCGCTCGGATGGCGGCAAGCGCCTCGCTCAGACAGT
GGCATCCACGTGACAGTGTGGATACAATGACAATGCCCGGTTTTCTCACCAGATTTACCGAGTGAAGT
CCTTGAGAACATGCCCCAGGACGCGGGCTGCTTACTGTAACAGCCAGCGACCCGCGTAGGGAATCAACGGAAA
AGTGGCATACAATTCGGGAAAAATTAATGAAAAACAACTCCGTTATCCAGCTTAATGAAAATACTGGGGAAT
ATCAATAGCAAAAAGCTAGATATTGAAGAAATGTTCAATTTATGAAATGGAATACAAGCCGAAGATGTGGGGG
ACCTTCTGGGAGGACCAAATGCTCATTTCCGTGGAAGATGTAATGACAATAGACCAGAAGTGATCATCTC
TTTGTTAGCCCAAGTGTAGAAAAATCTCTTCCGGGACAGTAATTGCCCTTCTGAGTGTGCATGACCAAGACTC
TGGAAAGAATGGTCAAGTTGTCTGTACACAGTGATAATTTACCTTTTAAATAGAAAAGTCAATAGGTATTA
TTATAGATTAGTAGACAAGGAATTTTGGACCGAGAAAAATGTCTCTATCTACAATATCACAGTATGGCCCTCAGA
TCTAGGAACACCACTCTGTCCACTGAAACTCAAATCGCTCTGCACGTGGCAGACATTAACGACCAACCTTCTAC
TTTCCCTCATGCTCTCTACTCAGGATATATCTAGAGAACAACTCGAGAGGAGCTCCATCTTTTCCCTGACTGC
ACAGACCCCGACAGCCAGGAGATGCCAGGTCACTTACTCTGTGACCGAGGACACGCTGCAGGGGGCGCCCTC
GTCTCGTATATCTCCACTCACTCTGACACCGGTGTCCTGTATGCGCTGCAATCTTTCGACTATGAGCAGATCCG
AGACCTGCACTACTGGTAACAGCCAGCGACAGCGGGGACCCGCTCAGCAACAAGTGTGACAGGCTGTT
CGTGCTGGACCAAGTACAACGCGCCGAGATCTGTACCCGCGCTCCCAACAGACGGTTCCATCTGGCTGGA
GCTGGCGCCCGCTCCGAGAGCGTGGCTACTGGTGA CCAAGTGGTGGCGGTGGACAGAGCTCGGGCAGAA
CGCTGGCTGCTCTACCGCTGTCTCAAGGCCAGCGGAGCTTCTCTCGTGGGTGTCACACGGGCGAGT
GGCAGCGGCGGCGAGCTGCTGGACAGAGATGCGCTCAAGCAGAGCCTCGTGCTGGCGCTCCAGGACCATGGCCA
GCCCTCTGCTGCTGCCACTGTFCACGCTACC GTAGCGGTGGTGACAGCATCCCGAGTCTCGAGGTTGG
CAGTCTGAAGCCTTCGGTCGACCCGAACGATTCGAGCCTTACACTCTATCTCGTGGTGGCAGTGGCTGCCATCTC
CTGTGTTCTTCTCGCTTTGTGCTGTGTTCTTGGGGCTCAGGCTGAGCGCGCTGCGACAAGTCAAGCCTGTCTCA
GGATTGCGGTGGCAGATTGTTAGSGCTGCTCGCTCACAATTTTGTGGGTGTGGAGAGGTACAGGCTTTCTGCA
GACCTATTCCGAGGAAGTCTCCCTCAGCCGCGACTCGCGGAAGAGTCACTGATCTTTCCCGAGCCCACTACGC
AGACATGCTCATCAGTCAGGAGGCGTGTGAGAAAAATGATCTTTGTTAACTCCGTAGATTTCATGAATATAA
GAATGAAGCTGATCATGTTGTCAGCAAGCCCGCCCAACACGGACTGGCGTTCTCTCAGCCCGACAGATGCTCA
CAGCGGCTCCCAAAATGGCGATGACACCGGCACTGGCCCAACAACAGGTTTGACACAGAGATGCTGAAGCCAT
GATCTTGGCGTCCGCCAGTGTGACGTGCTGATGGGAGCTCCACCCTGGGAGGGGTGGCGGCCCATGGGATTGAG
CGCCGCTACGGACCCAGTTACCTGTCAGCAGTGCACGCTACCGCCAGAAATGTTACATCTCCAGGACGACAA

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FIGURE 1770B

TGCCACACTGACCAACGCAGCTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGCAACAAGAAGAAGTC
GGGCAAGAAGGAGAAGAAGTAACATGGAGGCCAGGCCAAGAGCCACAGGCGGGCTCTCCCCAACAGCCCAGCT
TCTCCTTACCTGCACCCAGGCCTCAGAGTTTCAGGGCTAACCCCCAGAATACTGGTAGGGGCCAAGGCCATGCCTC
CCCTTGGGAACAGAAACAAGTGCCAGTCAGCACCTACCCCTTCCCCCCCCAGGGGGTGAATATGCAAAAGCAG
TTCCGGCTGGGAACCCCCATCCAATCAACTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAGAACC
TTTGCCACACCCCGTTTAGTTACAGCTGAACCTCCTCCATCTTCCAAATCAATCAGGCCCATCCATCCCATGCCTC
CCTCCTCCCCACCCCACTCCAACAGTTCCTCTTCCGAGTAAGGTGGTTGGGGTGTGTAAGTACCAAGTAACCT
ACAAGCCTCCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGCCTCTCCTTTGATTCTCAATCTTCCCC
CAAAGCATGGTTTTGGTGCCAGCCCTTCACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATG
ATCACCATCCCCATGGTACTGATGCTTGTGGATTAGGGAGGGCATTTTGTACCAAGCCTCTTCCCAACGCC
TGGGGACCAGTCTTCTGTTTTGTTTTTCATTGTTTGACGTTTCCACTGCATGCCTTGACTTCCCCACCTCCTCC
TCAAACAAGAGACTCCACTGCATGTTCCAAGACAGTATGGGGTGGTAAGATAAGGAAGGGAAGTGTGTGATGTG
GATGTTGGGGGCATGGACAAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGCTCAGGG
GACTGACAACATCTCCAGATTCAGGCCATAAACCAATAACTAGGCTGGACCTTCCCCTACATAATAGGGCTC
AGCCCAGGCAGCCAGCTTTGGGCTGAGCTAACAGGACCAATGGATTAACTGGCATTTTCAGTCCAAGGAAGCTCG
AAGCAGGTTTAGGACCAGGTCCCCTTGAGAGTCAAGGGGCCCTGTGGGTGCTGGGTACTCCAGAGGTGCCAC
TGGTGGAAAGGTCAGCGGAGCCCCAGCAGGAAGGTTGGGCCAGCCAGGCCATCTTATGCTCCCTGGGTTGGGGAGG
CAGGGAGCTAGGCGAGGACCAAAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCAACAGGGCCCCTGCC
CTCCTGAAGCCTCAGTCTTCACTTGCAGGTGCGGTTTCTCTTCCGTGAAGGCCACTGCCAGGTCCCCAGTG
CGCCCCCTAGTGCCATAGCCTGGTTAAAGTTTCCCAGTGCCCTCTTGTGCATAGACCTTCTTCTCCACCCCT
TCTGCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTACAGTAGTGTAGCGCC
CCCTCCCTCTTTCGGCTGGTGTAGAATAGCCAGTAGTGTAGTGGGTGTGCTTTTACGTGATGCGGGTGGGCGAG
CGGGCGGCGGCTCGCGCAGCGCTGTGCTTGTATCTGCCCGCGCGGCGCGCTGTGTGTTTTGTGTGTGTGTC
ACGCGCTAAGGCGACCCCTCCCCGCTACTGACTTCTCCTATAAGCGCTTCTCTCGCATAGTCACGTAGCTCCC
ACCCCAACCTCTTCTGTGTCTACGCAAGTTTTATACTCTAATATTTATATGGCTTTTCTTCGACAAAAA
ATAATAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1771

MAAPQSRPRRGELILLCALLGLTWEIGRGQIRYSVPEETDKGSFVGNISKDLGLDPRKLAKHGVRIVSRGRTQLF
ALNPRSGSLITAGRIDREELCAQSPRCLININTLVEDKGKLFGEIEIIDINDNNPKFQVEDLEVKINEIAVPGA
RYPLPEAVDPDVGVNSLQSYQLSPNHHSFSLDVQTGDNGAINPELVLERALDREEEAAHHLVLTASDGGKPPRSSST
VRIHVTVLDTNDNAPVFPHPIYRVKVLNMPPGTRLLTVTASDPDEGINGKVAYKFRKINEKQTPFLQNLNENTGE
ISIAKSLDYECCSFYEMEIQAEDVGALLGRTKLLISVEDVNDNRPEVIIITSLFSPVLNLSLPGTVIAFLSVHDQD
SGKNGQVVCYTRDNLFPKLEKSIGNYYRLVTRKYLDRENVSIYNITVMASDLGTPPLSTETQIALHVADINDNPP
TFPHASYSAYILENNLRGASIFSLTAHDPDSQENAQVTYSVTEDTLQGAPLSSYISINSDTGVLVALQSFDEYEQI
RDLQLLVITASDSDGPPPLSSNMSLSLFLVDQNDNAPEILYPALPTDGSTGVELAPRSAERGYLVTKVAVDRDSGQ
NAWLSYRLKASEPGLFSVGLHTGEVRTARALLDRDALKQSLVAVQDHGQPPPLSATVTLTVAVADS IPEVLTTEL
GSLKPSVDPNDSSLTLYLVVAVAAISCVFLAFVAVLLGLRLRRWHKSRLQLDQSGGRLVGVVPASHFVGVEEVQAF
QTYSQEVSLTADSRKSHLIFPQPNYADMLISQEGCEKNDSLLTSVDFHEYKNEADHGQQAP PNTDWRFSQAQRPG
TSGSQNGDDTGTWPNQFDTEMLQAMILASASEAADGSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGS
NATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

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FIGURE 1772A

AGAATGGGCTCTAGGCGCCGCTGCTACCAATCAGGGAATGGGAAGCTGCGGCCATTAGTCCCTCCCTCCCCC
GCCTCTACCACACAAAGCGGAATGAGATGGATCTACAGATCCTGACACTGGAGACTTAGAAGTATTTCTCCTC
GCTTTCTGATATATTTTGGATGTAGTCGGCTTAGGACTTCATAGATACATAAGCCGATTACACCAACACAGCTC
GAGAAACCGCGGAATATCGGCTTAGAGCCTGCCATGCGGAATCGGCTACAGCGCGGGGACCGCAGTCCGCTGTGTG
CTGCTGCTGTGCATTTTCTCGGGGACGCTGCGGGGGTTCGGGGCCAGGCAGATCCGATATTCGGTGCCAGAAGAG
ACCGAAAGGGCTCCTTCGTGGGCAATATCTCCAAAGACCTGGGGCTGAGAGCCCCGGAGCTGGCGAAGCGCGGA
GTCCGCATCGTCTCCAGAGGAAGACACAGCTTTTCGCTGTGAATCCGCGAAGCGGCAGCTTGATCAGGCGAGCG
AGGATAGACCGGGAGGAGCTCTGTGAGACGGTGCTCCTGTTTTAAATATGGAACCTTCGTGGGAAGACACC
TTGAAGATTTCGGAGTGGAGGTGGAAAATAATAGATATTAATGATAACGCCCCAGCTTCCAGGAGGACGAAGTG
GAGATAAAAGTCAGTGAGCAGCGCAATTCCTGGGGCGCGATTGCTCTTCCTAATGCTAGGAGTCCAGATGTGGGC
GTGAATCCCTCCAGAGCTACCAAGCTCAGCCCTAATAATTACTTTTCTTCGCACTGCGGGGCGAAGCGGATGGG
GCCAAGAATCCAGAGCTAGTACTGGAGGGAAGCCTGGACCGAGAGAAAGGGCTGCTCACTGCTCCTCCTCACA
GCTTTAGATGGAGCGCATCCCATCCGAAGGGCGCAGTTCCCATTCGTGTGGTGCTCTCGATGTAATGATCAC
ATCCCAATGTTTACACAGTCCGTATATCGCGTGAGTGTTCCAGAAAACATCAGCTCCGGAACCTCGGTGCTGATG
GTTAATGCAACGGATCCAGACGAGGGGAATCAACGGGGGAAGTAATGATTATTCGGAACATGGAAAGCAAGGCT
TCTGAAATATTCCAATTGATTTCACAACTGGAGAAGTTCAAGTACGGGGGCTCTGGATTGTAAGAAATATAGA
TTCTATGAGATGGAAATTCAGGGCCAAGATGGTGGAGGTCTCTTTACCACACAGCAGATGTTGATCACTGTTGTG
GATGTGAATGATAACGCTCCAGAAATAAATATACCTCTTCTATTAATTCAAATTCGGAACACTCTCTCAGTG
ACAGTGTATGCTCTCTTAAATGTGCAAGATCAAGATTCTGGAGAAAATGGTCAAGTCTCCTGTTTTATTCCTAAC
CACCTGCCTTTTAAATTAGAAAAAGCTATTAGGAAATATTACAAATGTATAACAAGCAGAGTGTGTCGACAGGGAG
TTGGTCCAGAGCTACAATATAACGTTGACAGCCACAGCAGGGAAGCCGCTTTGTCTGCGACCAACTCATGT
TGCGTGAATGTGGCAGATGACAACGATAACCCCTCCGTTTTTCTCTACTCTCTTACTCTGCCTACATTCCCGAA
AACACATCCACGGGGTGCTCCTATCTCTCAGTGACCCGCTCGACCCGGACAGCAACAGAATGCCCTGGTCACT
TACTCTCTGACGGATGACACTGTCCAGGGGGTGCTCTGTCTCCTATGTCTCTATTAACCTCCAACACTGGTGTT
CTCTATGCCCATAAATCTTCGACTATGAGCAGTTTCGAGACTTAGAACTGAGAGTGATAGCAGTGCAGACGGG
GACCCGCCCCCTCAGCAGCAACGTGTCGCTGAGCCTGTTCTGTCTGGACGAAGACAAATGCGCCCGAGATCTCTG
TACCTCTGCCCTCCCCACAGCGGCTCCACTGGCGTGGAGCTGGCGCCCGCTCTGCGGAACCTGGCTACCTGGTG
ACCAAGGTGGTTGTCGGTGGACAAGATTCAAGCCAGAAGCCTGGCTGTCTATTCGCTGCTTAAGCTACCGCAG
CCGGGACTCTTCGCGGTGGGGGACACACGGGCGAGCAAGCCCCGCCAACAGGACTGGCGTTTCTCTCAGGCC
CAGAGACCCGGCACCAAGCGGCTCCAAAATGGCGATGACACCGGCACCTGGGCCAACACAGTTTGCACACAGAG
ATGCTCGAAGCCATGATCTTTGGCGTCCGCCAGTGAAGCTGCTGATGGGAGCTCAACCTCGGCCAGTACCGCCAGAATGTCTAC
AECATGGGATTGAGCGCTCTCAGGACCCAGTTACCTCTGACGCACTGGCCGACTACCGCCAGAATGTCTAC
ATCCACGGCAGCAATGCCACTGACCAACGCACTGGCAAGCGGGATGGCAAGGCCCCAGCAGGTGGCAATGGC
AACAAAGAAGAAGTCGGCGAAGAAGGAAGAAGTAACTAGGAGCCAGGCAAGGCCACAGGGCGGCTCTCC
CAACCGCCAGCTTCTCTTACCCTGACCCAGGCGCTCAGAGTTTACGGGCTAACCCCCAGAAATCTGTGATGGG
CCAAGGCCATGCTCCCCCTGGGGAACAGAAACAGTGGCCAGTCAGCAGCTACCCCTTCCCCCGAGGGGTTGA
ATATGCAAAAGCAGTTCCGCTGGGACCCCAATCAATCACTGCTGTATACCATGAGGGGATGGGGTTACTGTAT
GACACCAAGAACATTTCGCCACACCCCGTTAGTTACAGCTGAACCTCTCCATCTTCCAAATCAATCAGGCCAT
CCATCCCATGCTCTCTCTCCCAACCCCACTCTTCCGAGTTCCTCTTCCCGAGTATGGGTGGTGGGGTTGTGA
GTACCAAGTAACCTACAAGCCTCTAGTTCTGAAAAGTTGGAAGGGCATCATGACCTCTTGGGCTCTCTCTTGT
TCTCAATCTTCCCCAAAGCATGGTTTGGTGCCAGCCCTTCACTCTCTCCAGAGCCCAAGATCAATGCTCAAG
TTTGGAGGACATGATCACCATCCGATGGTACTGATGCTGTGAGTTTAGGGAGGGCAATTTGTGTTACCAAGCC
TCTTCCCAACGCCCTGGGGACCAAGTCTCTGTTTGTGTTTTCATGTTTGAAGTTTCCACTGCATGCTTGAAT
CCCCCACTCTCTCTCAACAGAGACTCCACTGATGTTTCCAGACAGTATGGGGTGGTGAAGTAAAGGAAGGA
AGTGTGGATGTGGATGTGGTGGGGCATGGACAAGCTTGACACATCAAGTTATCAAGGCCTTGGAGAGGGCTCT
GTATGTCTCTCAGGGGACTGACAACATCTCCAGATTCCAGCCATAAACCAATACTAGGCTGGACCTTCCCAT
ACATAATAGGGCTCAGCCAGGCGCAGCTTGGGCTGAGCTAACAGGCAACATGATTAACTGGCATTTTCAG
TCCAAGGAAGCTCGAAGCAGGTTTAGGACCAAGTCCCTTGAAGAGTCAAGGGGGCTCTGTGGGTGCTGGGTAC

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FIGURE 1772B

TCCAGAGGTGCCACTGGTGGAAAGGGTCAGCGGAGCCCCAGCAGGAAGGGTGGGCCAGCCAGGCCATTCTTAGTCC
CTGGGTTGGGGAGGCAGGGAGCTAGGGCAGGGACCAAATGAACAGAAAGTCTCAGCCCAGGATGGGGCTTCTTCA
ACAGGGCCCCTGCCCTCCTGAAGCCTCAGTCCTTCACCTTGCCAGGTGCCGTTTCTCTTCCGTGAAGGCCACTGC
CCAGGTCCCCAGTGCGCCCCCTAGTGGCCATAGCCTGGTTAAAGTTCGCCAGTGCCTCCTTGTGCATAGACCTTC
TTCTCCCACCCCTTCTGCCCTGGGTCCCCGGCCATCCAGCGGGGCTGCCAGAGAACCCAGACCTGCCCTTAC
AGTAGTGTAGCGCCCCCTCCCTCTTTCCGGCTGGGTAGAAATAGCCAGTAGTGATGCGGTGTGCTTTTACGTGA
TGGCGGGTGGCAGCGGGCGGGGGCTCCGCGCAGCCGTCTGTCTTGATCTGCCCGCGCGGCCCGTGTGTGT
TTTGTGCTGTGTCCACGCGCTAAGGCGACCCCTCCCCCGTACTGACTTCTCCTATAAGCGCTTCTCTTCGCATA
GTCACGTAGCTCCCACCCACCCCTTCTCTGTGCTCAGCAGTTTATACICTAATATTTATATGCGCTTTTTT
TCTTCGACAAAAAATAATAAACGTTTCTTCTGAAAAGCTG

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FIGURE 1773

MANRLQRGDRSRLLLLCIFLGLTLRGFRARQIRYSVPEETKGSFVGNISKDLGLEPRELAKRGVRIVSRGKTQL
FAVNPRSGSLITAGRIDREELCETVSSCFLNMELLVEDTLKIYGVEVEIIDINDNAPSFQEDEVEIKVSEHAIPG
ARFALPNARDPDVGVSLSQSYQLSPNNYFSLQLRGRITDGAKNPELVLEGSLOREKEAAHLLLLLTALDGGDPIRKG
AVPIRVVLDVNDHIPMFTQSVYRVSVPENISSGTRVLMVNATDPDEGINGEVMYSFRNMESKASEIFQLDSQTG
EVQVRGSLDFEKYRFYEMEIQQDGGGLFTTTTMLITVVDVNDNAPEITITSSINSILENSPPGTIVALLNVQDQ
DSGENGVSCFIPNHLPPFKLEKTYGNYYKLITSRVLDRELVSQSYNITLTATDQGSPPLSAETHVWLNVDNDNP
PVFFHSSYSAYIPENNPRGASIFSVTALDPDSKQNALVTYSLTDDIVQGVPLSSYVSINSNTGVLYALQSFDYEQ
FRDLELRVIARDSDGPPPLSSNVSLSLFVLDQNDNAPEILYPALPTDGSSTGVELAPRSAEPGYLVTKVVAVDKDSG
QNAWLSYRLLKASEPGLFAVGEHTGEQAPPNTDWRFSQAQRPGTSGSQNGDDTGTWPNNQFDEMLQAMILASAS
EADGSSSTLGGGAGTMGLSARYGPQFTLQHVPDYRQNVYIPGSNATLINAAGKRDGKAPAGNGNKKKSGKKEKK

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FIGURE 1774

CAGAAAGCCATGTCGGA CTGGCGCCAGCGCCCAAGCGCTAACCCGCTGAAAGTTTCTCAGCGAAATCTCAGGG
ACGATCTGGACCCCGCTGAGAGGAAGTGTCTTTGAGTGAGATGGTCCCAAGAGCGCTGGAGGAGCGGACTGCAAGC
CCCGCCCAACACGGACTGGCGTTTCTCTCAGGCCAGAGACCCGGCAGCGGCTCCCAAAATGGCGATGACAC
CGGCACCTGGCCCAACACCAAGTTTGACACAGAGATGCTGCAAGCCATGATCTTGGCGTCCGCCAGTGAAGCTGC
TGATGGGAGCTCCACCTGGGAGGGGGTCCGGCCACCATGGGATTGAGCGCCCGCTACGGACCCAGTTTACCCCT
GCAGCAGCTGCCGACTACGCCAGAATGTCTACATCCAGGCAGCAATGCCACACTGACCAACCGAGCTGGCAA
GCGGGATGGCAAGGCCCAAGCAGGTGGCAATGGCAACAAGAAAGTCCGGGCAAGAAGGAGAAGAAAGTAAATG
AGGCCAGGCCAAGAGCCACAGGGCGGGCTCTCCCAACCAAGCCAGCTTCTCCTTACCTGACCCAGGCCCTCAGA
GTTTCAGGGCTAACCCCAAGAATACTGGTAGGGGCCAAGGCCATGCTCCCTTGGGAAACAGAAACAAGTGCCCA
GTCAGCACCTACCCCTTCCCCCAGGGGGTTGAATATGCAAAAGCAGTTCCGCTGGGAACCCCCATCCAATCAA
CTGCTGTACCCATGGGGGTAGTGGGGTTACTGTAGACACCAAGAACCATTGTGCCACACCCCGTTTAGTTACAGCT
GAACCTCTCATCTTCAAATCAATCAGGCCCATCCATCCATGCCTCCCTCTCCCCACCCCACTCCAACAGTT
CCTCTTTCCCGAGTAAGGTGGTGGGGTGTGAAGTACCAAGTAACCTACAAGCCTCCTAGTTCTGAAAAGTTGG
AAGGGCATCATGACCTTTGGCCTCTCCTTTGATTCTCAATCTTCCCCAAAGCATGGTTTGGTGCCAGGCCCTT
CACCTCCTTCCAGAGCCCAAGATCAATGCTCAAGTTTGGAGGACATGATCACCATCCCCATGGTACTGATGCTT
GCTGGATTAGGGAGGGCATTTTGCTACCAAGCCTCTTCCCAAGCCTCGGGGACCACTCTTCTGTTTTGTTTTT
CATTTGTTGACGTTTTCCACTGCATGCCTTGACTTCCCCACCTCCTCCTCAAACAAGAGACTCCACTGCATGTTT
CAAGACAGTATGGGGTGGTAAGATAAGGAAGGGAAGTGTGTGGATGTGGATGGTGGGCGCATGGCAAGCTTGA
CACATCAAGTTATCAAGGCCTTGGAGGAGGCTCTGTATGTCTCAGGGGACTGACAACATCCTCCAGATTCCAGC
CATAAACCAATACTAGGCTGGACCTTCCCCTACATAATAGGGCTCAGCCAGGCAGCCAGCTTTGGGGCTGAG
CTAACAGGACCAATGGATTAACTGGCAATTCAGTCCAAGGAAGCTCGAAGCAGGTTTAGGACCAAGTCCCTTG
AGAGGTGAGAGGGGCTCTGTGGGTGCTGGGTACTCCAGAGGTGCCACTGTGTGGAAGGGTCAGCGGAGCCCAAGC
AGGAAGGTGGGCGAGCCAGGCCATCTTAGTCCCTGGGTGGGGAGGCAGGAGCTAGGCGAGGCAACCAATGA
ACAGAAAGTCTCAGGCCAGGATGGGGCTTCTTCAACAGGGGCCCTGGCCCTCCTGAAGCCTCAGTCTTCACTTG
CCAGGTGGCGTTTCTCTTCCGTGAAGGCCACTGCCAGGTCCCAAGTGCGCCCTTCTAGTGCCCATAGCCTGGTTA
AAGTTCCCAAGTGCCCTCTTGTGATAGACCTTCTTCCCAACCCCTTCTGCCCCGGGTCCCGGCCATCCAG
CGGGGTGCCAGAGAACCACAGACCTGCCCTTACAGTAGTGTAGCGCCCTTCCCTCTTTCGGCTGGGTAGAAAT
AGCCAGTAGTGTAGTGGGTGTGCTTTTACGTGATGGCGGGTGGGCAGCGGGCGCGGGCTCCGCGCAGCCGTCT
GTCTTGTATCTGCCCCGCGCGGCCCGTGTGTGTTTTGTGCTGTGTCCAGCGCTAAGGCGACCCCTCCCCGT
ACTGACTCTCTATAAGCGCTTCTCTGCGATAGTCACGTAGCTCCACCCCACTCTTCTGCTGTCTCACGC
AAGTTTTTACTCTAATATTATATGSGCTTTTTTCTTCGACAAAAAATAATAAACGTTTCTTCTGAAAAGCT

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FIGURE 1775

MVPEAWRSGLQAPPNTDWRFSQAQRPGTSGSQNGDDTGTWPNNQFDTEMLQAMILASASERADGSSTLGGGAGTM
GLSARYGPQFTLQHVPDYRQNVYIPGSNATLTNAAGKRDGKAPAGGNGNKKKSGKKEKK

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FIGURE 1776

CAGAAAGCCATGTCGGACTCGCGGCCACGCGCCCAAGCGCTAACCCGCTGAAAGTTTCTCAGCGAAATCTCAGGG
ACGATCTCGACCCCGCTGAGAGGAACCTGCTTTTGAGTGAGATGTCGCCAGAGGCCCTGGAGAGCGGACTGGTAAG
CACCGGGAGGGTAGTGGGAGTTTGGCTTCTGCTTGGTGCCCTGAAACAAGGCTTCCACGGTATTCTACTATGAGAT
CCCGGAGGAAAGAGAGAAGGGTTTCGCTGTGGGCAACGTGGTCGCGAACCTTGGTTTGGATCTCGGTAGGCTCTC
AGCCCGCAGGTTCCGGGTGGTGCTGAGAGTACCGCAAGATTCTTTGAGGTGAACCGGGAGACCGGAGAGATGTT
TGTGAACAGCGCTCGGATCGAGAGGAGCTGTGTGGGACACTGCCCTCTTGCACTGTAACTCTGGAGTTGGTAGT
GGAGAACCCTGGAGCTGTTACGCTGGAAGTGGTGATCCAGGACATCAACGACAACATCTGCTTTCCCTAC
CCAGGAAATGAAATTGGAGATTAGCGAGGCGGTGGCTCCGGGGACCGCTTTCCGCTCGAGAGCGCGACCATC
CGATGTGGGAAGCAACTCTTTACAAACCTATGAGCTGAGCGGAAATGAATACCTTTGCGCTTCGCGTGCAGACGCG
GGAGGACAGCACAAGTACGCGGAGCTGGTGTGGAGCGCGCCCTGGACCGAGAACGGGAGCCTAGTCTCCAGTT
AGTGCTGACGGCGTTGGACGAGGGGACCCAGCTCTCTCCGCCAGCCTGCCTATTACATCAAGGTGCTGGACGC
GAATGACAAATGCGCTGTCTTCAACAGTCTTGTACCGGGCGCGCTCTCGGAGGATGCACCTCCGGCAGCGG
CGTGGTACAAGTCTTGCACCGGATCTGGATGAAGGCCCAACCGTGAAATTTATTACTCTTCGGCAGGCCACAA
CCGCGCCGGCGTGGGCAACTATTCCGCTTAGACCTTGTAAACGGGATGCTGACAAATCAAGGGTCGGCTGGACTT
CGAGGACACCAAACCTCCATGAGATTACATCCAGGCCAAAGACAAGGGCGCCAAATCCGGAAGGACACATTGCAA
AGTGTGTGGTGAGGTTGTGGATGTGAATGACAACGCCCGGAGATCAAGTACCTCCGCTGACAGCCGAGTACC
CGAGGATGCCCTCTCGGGACTGTATCGCTTTGCTCAGTGTGACTGACCTGATGCTGGCGAGAACGGGCTGCT
GACCTGCGAAGTTCCACCGGGTCTCCCTTTACGCTTACTTCTTCCCTCAAGAAATTACTTCACTTTGAAAACAG
TGCAGACCTGGATCGGGAGACTGTGCCAGAATACAACCTCAGCATCACCCCGGAGACGCGGAAACCCCTTCCCT
CTCAGCCCTTACAATAGTGCCTGTTCAAGTGTCCGACATCAATGACAACCTCCACAATCTTCTCAATCTTCCCTA
CGACGTTTACAATTGAAGAAAACAACCTCCCCGGGGCTCCAACTACTAAACCTAAGTGTCTGGGACCCGACGCCC
GCAGAAATGCTCGGCTTTCTTTCTTCTTGGAGCAAGGAGCTGAAACCGGGCTAGTGGGTCGCTATTTCACAAT
AAATCGTGACAATGGCATAGTGTATCCTTAGTGCCCTTAGACTATGAGGATCGCGGGGAATTGTAATTAAACAG
TCATATCAGCGTATGGGGGACCCCGGTCTAGCCACCAACATCAGCGTGAAACATATTGTCACTGATCGCAATGA
CAATGCCCCCCAGGTCTATATCTCGGCCAGGTGGGAGCTCGGTGAGAGATGCTCGCTCGAGGTACCTCAGCTGCC
CCACCTAGTGTACGGGTGGTAGGCTGGGACGCGGATGCAGGGCAAAATGCCTGGCTCTCCTACAGTCTCTTGGG
ATCCCTAAACAGAGCCTTTTGGCATAGGGCTGCACACTGGTCAAACTAGTACTGCCGTCAGCTCCAGACAC
AGATTACACCGAGCAGACTCTCAGGCTTGTATCAAGACAATGGGGAGCCTTCGCTCTCCACCACTGCTACCT
CACTGTGTCAGTAACCGAGGACTCTCTGAAGCCGAGCCGAGTTCCCTCTGGCTCTGCCCTCCGCGAGGACAGAA
AAAAAATCTACCTTTTATCTACTTCTTCTCTAATCTGGTTTCTGTGGGGTTTGTGGTCAAGTGTTCGGAGT
AATCATATTCAAAGTTTACAAGTGGAAAGCAGCTAGAGACCTATACCGAGCCCCGGTGAGCTACGTACCGAAC
ACCAGGCCCCCTCTTGACGCGGACGCCCTGCGGGGAGGCCGTATGTCGCCGACCTTTACCATCAGGTGTATCT
CACCACGGACTCCCGCGGACGACCCGCTGCTGAAGAAACCTGGTGACGCCAGTCCAATGGCCACGCCGACAGAA
CAGCGTCGGGAGCTGTGATCCGGTGTCTATAGGCGAGGTGTGGGTGACAGAGAGCGCCCTCCGCGACAGGTAAAG
GTTTAGCAAGTCACTGTGACCCTGTTAGTGCTTTTTTATCTCATCATATTAGGAAGGAATGGAGCTGTTT
TTTTAGTGATGAAGATGTTTTCTGGTGATGATTCACACTTCAACTGGCCCTTCTAGATCAAAGTTAGTGCC
TTTGTGAGATGGTGGCTGCCAGAGTGTGGTTTGTGGTCCCAATTCAAGGGGAGAGTACTTGACTCATCTGTGGA
CCTAATTCACATCTCTCAG

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FIGURE 1777

MVPEAWRSGLVSTGRVVGVLALLGALNKASTVIHYEIPEREKGFVGNVVANGLDGLGSLARRFRVVGASRR
FFEVNRETGEMFVNDRLDREELCGTLPSCTVLELVVENPLELFSVEVVIQDINDNNPAFPTQEMKLEISEAVAP
GTRFPLESAHDPDVGSNSLQTYELSRNEYFALRVQTTREDSTKYAELVLERALDREREPSLQLVLTALDGGTPALS
ASLP IHIKVL DANDNAPVFNQSLYRARVLEDAPSGTRVVQVLATDLDEGPNGEIIYSFGSHNRAGVRQLFALDLV
TGMLTIKGRLDFEDTKLHEIYIQAQDKGANPEGAHCKVLVEVVVDVNDNAPEITVTSVYSPVPEDAPLGTVIALLS
VTDL DAGENGLVTCEVPPGLPFSLTSSLKNYFTLKT SADLDRETVP EYNLSITARDAGTPSLSALTIVRVQVSDI
NDNPPQSSQSSYDVYIEENNLP GAPILNLSVWDPDAPQNA RL SFFLLEQGAETGLVGRYFTINRDNGIVSSLVPL
DYEDRREFELTAHISDGGTPVLATNISVNIFVTDNRDNAPQVLYPRPGGSSVEMLPRTSAGHLVSRVVGWDADA
GHNAWLSYSLGSPNQSLFAIGLHTGQISTARPVQDTSRQTLTVLIKDNGEPSLSTTATLTVSVTEDSPEARA
EFP SGAAPREQKNLTFYLLLSLILVSVGFVVTVFGV IIFKVYKWKQSRDLYRAPVSSLYRTPGPSLHADAVRGG
LMSPHLYHQVYLTDSRRSDPLLKKPGAASPLASRQNTLRSCDPVFYRQVLGAESAPPGQVRF SKSCLTLLVLFY
SYIILRKEWSCFFSDEDVFLVMHSHFQLALPRSKLVPL

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FIGURE 1778

CCTCAGTTTCCTTGTTTGTAATAAGTTGAACATAATCTTGACCCCTTAATGCTTGTTTGAAATCCAAGGCAAA
AAACAATTGCAAGCGCCCTTACTTCCGTGTTGCTTCATACTCCTCTTGCGCCTGCGCTGCTCCTTGGAGCAGAG
GCGGGGCCAACAGCCTGTTTTAGAAACCCTCCAGTCCTTAGCTCGTTTAGAACACAAGACTCCAAGCTTATTGG
AGGGCTATCTTGCCCTACGGCTCCAAGCCGCTTTTACGGCGTTTTTCAGCTCGCCATTCACTTCGCTGTGAAGA
TGCGCTCGGGCAGCGGGTAGGTGTTGTGTCGAGGAGGAGGTTTTGCGGGGTGGGGAATGGTTTTTCAGACCTG
AATAGAGACAAACTCCTGCACCCGACTGGCTTCCCGATATCTCCTCGAGATCCAGGGTTCAGGTTCAAGAACTC
CCCAGTAATAGGCCTTGGCAGAGGGTCAGTAGAATCGCGGAGGTTTTCTCGGGTGGGGTCTTGAGGCTACCTCAG
TCTTCTCGTACAGTCCAAGAGGCTTCGCTTTCAAACGTCCTGTAGACACCTGGACC GCGAGGGCGCGGTTCCTC
TGCTTCTCTAGGGGCCAGACACGGCGACGGATCTTGACGCTTTTCTCTCCCAACAGACAAAAAACTTGGACTTT
CGCCGAAAGTGGGACAAAGATGAATATGAGAAACTCGCCGAGAAGAGGCTCACGGAAGAGAGAGAAAAAGAT
GGAAAAACAGTGCAGCCTGTCAAGCGAGAGCTTTTACGGCATAGGGACTACAAGGTGGACTTGGAATCCAAGCTT
GGGAAGACAATTGTCAITACCAAGACAACCC

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FIGURE 1779

TCGATAGCCGGAAGTCATCCTTGCTGAGGCTGGGGCAACCCAGCGAGTCGAGACAGCAGGCGGCTCAAGTGGAC
AGCCGGGATGCGAGAGCGTGCGGCGCTGGAGGAGCTGGTGAACCTTCAGGGAGAGCGCGTGCAGGGCCTCAAGCA
CGCAAGGCCAGCGCCGAGCTGATCGAGGAGGAGGTGGCGAACTCCTGAACTGAAGGCACAGCTGGGTCTCTGA
TGAAGCAAAACAGAAATTTTGCTCAAACCCCCAAGGGCACAAGAGACTATAGTCCCCGGCAGATGGCAGTTCTG
CGAGAAGGTGTTTGCAGTAATCATCCGTTGCTTCAAGCGCCACGGTGCAGAAGTCATTGATACACCTGTATTGGA
ACTAAGGAAAACACTGATGGGAAAGTATGGGGAAGACTCCAAGCTTATCTATGACCTGAAGGACAGGGCGGGGA
GCTCCTGTCCTTTCGCTATGACCTCACTGTTCTTTTGCCTGGGTATTGGCAATGAATAAACTGACCAACATTAA
ACGCTACCAATAGCAAAGGTATATCGGCGGGATAAACCAGCCATGACCCGTGGCCGATACCGGGAATTCTACCA
GTGTGATTTTGACATTGCTGGGAACCTTGATCCCATGATCCCTGATGCAGAGTGCCCTGAAGATCATGTGCGAGAT
CCTGAGTTCACTTCAGATAGCGACTTCCTGGTCAAGGTAAACGATCGACGCATTCTAGATGGGATGTTTGCTAT
CTGTGGTGTTTCTGACAGCAAGTTCGGTACCATCTGCTCCTCAGTAGACAAGCTGGACAAGGTGCTCTGGGAAGA
GGTGAAGAATGAGATGGTGGGAGAGAAGGCCCTTGCACCTGAGGTGGCTGACCGCATTTGGGGACTATGTCCAGCA
ACATGGTGGGGTATCCCTGGTGAACAGCTGCTCCAGGATCCTAAACTATCCCCAAAACAAGCAGGCCCTTGGAGGG
CCTGGGAGACCTGAAGTTGCTCTTTGAGTACCTGACCTATTTGGCATTGATGACAAAATCTCCTTTGACCTGAG
CCTTGCTCGAGGGCTGGATTACTACCTGGGGTGATCTATGAGGCAGTGCTGTACAGACCCGAGCCCAAGGCAGG
GGAAGAGCCCCTGGGTGTGGGCAGTGTGGCTGCTGGAGGACGCTATGATGGGCTAGTGGGCATGTTTCGACCCCAA
AGGGCCGAAGGTGCCATGTGTGGGGCTCAGCATTGGGGTGGAGCGGATTTTCTCCATCGTGGGAACAGAGACTAGA
GGCTTTGAGGAGAGAAGATACGGACCACGGAGACACAGGTGCTTGTGGCATCTGCACAGAAGAAGCTGTAGAGGA
AAGACTAAAGCTTGTCTCAGAACTGTGGGATGCTGGGATCAAGGCTGAGCTGCTGTACAAGAAAGCCCAAGCT
ACTGAACCAAGTTACAGTACTGTGAGGAGGACGGCATCCCACTGGTGGCTATCATCGGCAGCAGGAACCTCAAGGA
TGGGGTCATCAAGCTCCGTTCAGTGACGAGCAGGGAAGAGGTGGATGTCCGAAGAGAAGACCTTGTGGAGGAAT
CAAAAGGAGAACAGGCCAGCCCTCTGCATCTGCTGAACCTGAACAACTATCAGAGGAAAGGAAGTGGGACTGGC
ACTATTTGAGGTTAAGACAACTGCATATGTACTTCAATTGCTTTGCACTTTTCCGTTTCAGCGGAAGACCTGAA
GAGTGGTCAGAACAGACCTTTGATTTTATTATGTTTATTATTGATTATTACTGGCAAAAACGGCCAGGTAC
AACACCTTTTTATACAAGGCCAGGAGGCTTAGTCCAGTCTGTCTCCTGGGCTACAAGGACCCAGCCTGAGAT
GGTCCCATCTGCAGGGCCCGCACCAGTTGGAGCAGATGCCTCCCAACCAAAATGGCAAAGGTCCAATAAAAT
GCCTCAACCAACGGAAAAAAAAAAAAAAAAAA

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FIGURE 1780

MAERAALEELVKLQGERVRGLKQKASAELEEEVAKLLKKAQLGPFDESKQKFVLKTPKGTRDYSRQMAVREK
VFDVIIRCFKRHGAVIDTPVFELKETLMGKYGEDSKLIYDLKDQGGELLSLRYDLTVPFARYLAMNKLNTIKRY
HIAKVYRRDNPAMTRGRYREFYQCDFDIAGNFDPMIPDAECLKIMCEILSSLQIGDFLVKVNDRRI LDGMFAICG
VSDSKFRTICSSVDKLDKVSWEVKNEMVGEKGLAPEVADRIGDYVQQHGGVSLVEQLLDQPKLSQNKQALEGLG
DLKLLFEYLTFLFGIDDKISFDLSLARGLDYYTGVIIYEAVLLQTPAQAGEEPLGVGSVAAGGRYDGLVGMFDPKGR
KVPCVGLSIGVERIFSIVEQRLEALEEKIRTETQVLVASAQKKLEERLKLVSLEWDAGIKAELLYKKNPKLLN
QLQYCEEAGIPLVAIIIGEQLKDGVIKLSVTSREEVDVRREDLVEEIKRRTGQPLCIC

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FIGURE 1781

ACGCAAAGCAGTGTGGGTGATTCTGAGGTGCACTGTGGGAAAGAGCTTGTGCGTCGCGTGTGCTGTTGGAGAC
TCGATTGTTGGTGACAGCGAAAGAACGATAACAAAATGCGGAGCGAGATAGTGAGCCGTTCTCCAACCCCTTTGG
CCCCCGATGGCCACGATGTGGATGATCCTCACTCCTCCACCAATCAAAACTCACCATGAAGACTTCAGGAAAC
TTCTCATGACCCCGAGGCTGCACCTACCTCTGCACCACCTTCTAAGTCACGTACCATGAGATGCCAAGGGAGT
ACAATGAGGATGAAGACCCAGCTGCACGAAGGAGGAAAAAGAAAAGTTATTATGCCAAGCTACGCCAACAAAGAAA
TTGAGAGAGAGAGAGAGCTAGCAGAGAAGTACCGGGATCGTGCCAAGGAAACGGAGAGATGGAGTGAACAAAGATT
ATGAAGAAACCGAGCTTATCAGCACCACAGCTAACTATAGGGCTGTGTGGCCCCACTGCTGAGGCGGACAAATCAG
CTGCAGAGAAGAGAAACAGCTTGATCCAGGAGTCCAAATTCTTGGGTGGTGACATGGAACACACCCATTGTGGTGA
AAGGCTTGGATTTTGCTCTGCTTCAAAAGGTACGAGCTGAGATTGCCAGCAAGAGAGAAAGAGGAAGGAACTGA
TGGAAAAGCCCCAGAAAGAAACCAAGAAAGATGAGGATCCTGAAAATAAAATTGAATTTAAACACGCTCTGGGCC
GCAATGTTTACCGAA TGCTTTTAAAGAGCAAGCATATGAGCGGAATGAGTTGTTCTGCGCGGCCGCGATGGCCT
ATGTGGTAGACCTGGATGATGAGTATGCTGACACAGATATCCCCACCACCTCTTATCCCGAGCAAGGCTGATTGCC
CCACCATGGAGGCCAGACCACACTGACCACAAATGACATTGTCTATTAGCAAGCTGACCCAGATCCTTTTCATACC
TGAGGCGAGGAAACCGTAACAAGAGCTTAAGAAGAAGGATAAAGGGAAAGCTGGAAGAGAAAGAAACCTCCTGAGG
CTGACATGAATATTTTGAAGACATTGGGGATTACGTACCTCCACAACCAAGACACCTCGGGACAAGGAGCGGG
AGAGATATCGGGAACGGGAGCGTGATCGGGAAAGAGACAGAGACCCTGACCGAGAGCGAGAGCGAGAACGAGATC
GGGAACGAGAGCGGAGAGCGGGACCGAGAGAGAGAAGAGGAAAAAGAGACACAGCTACTTTGAGAAGCCAAAAG
TAGATGATGAGCCATGGACGTTGACAAAGGACCTGGGTCTACCAAGGAGTTGATCAAGTCCATCAATGAAAAGT
TTGCTGGGTCTGCTGGCTGGGAAGGCACAGAAATCGTGAAGAAGCCAGAAGACAAAAGCAGCTGGGAGATTCT
TTGGCATGTCCAACAGTTATGCAAGAGTGCTACCCAGCCACGATGGATGACATGGCTGTGGATAGTGATGAGGAGG
TGGATTATAGCAAAATGGACAGGGTAACAAGAAGGGGCCCTTAGGCCGTTGGGACTTTGATACCCAGGAAGAAT
ACAGCGAGTATATGAACACAAAGAAAGCTTTGCCCAAGGCTGCAATCCAGTATGGTATCAAAATGTCTGAAGGGC
GGAAAACGAGCGCTTCAAGGAAACCAATGACAAAGCAGAGCTTGATCGCCAGTGGGAAGAGATTAGTGCAATCA
TTGAGAAGAGGAAGAAGATGGAAGCTGATGGGGTTGAAGTCAAAAGACCAAAATACTAA

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FIGURE 1782

MPERDSEFFSNPLAPDGHVDVDPHSFHQSCLTNE DFRKLLMTFRAAPTSA PPSKSRHHEMPREYNEDEDP AARRR
KKKSYAYAKLRQQEIERERELA EKYRDRAKERRDGVNKDYETE LITSTANYRAVGPTAEADKSAAEKRRQLIQES
KFLGGDMETHLVKGLDFALLQKVRAEIASKEKEEEELEMEKPQKETKKDEDPENKIEFKTRLGRNVYRMLFKSKA
YERNELFLPGRMAYVVDLDDEYADTDIPTTLIRSKADCP TMEAQTTLITNDIVI SKLTQILSYLRQGTRNKKLKK
KDKGKLEEKPP EADMNIFEDIGDYVPSTTKTFRDKERERYRERERDRERDRDRDRERERERDRERERDRERE
EEKKRHSYFEKPKVDDEPMDVDKGGSTKELIKSINEKFAGSAGWEGTESLKKPEDKKQLGDFFGMSNSYACYP
ATMDDMAVDSD EEEVDYSKMDQQNKKGPLGRWDFDTQEEYSEYMNNKEALPKAAFQYGI KMSEGRKTRRFKETNDK
AELDRQWKKISATII EKKKKMEADGVEVKRPKY

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FIGURE 1783

GTGACCCAGGCCCTGGTCACTCCATGCTTTGGAGGGTGCTTTTGTCAAAGAGGCCCTCCTTCCCTACCCAGAG
CTGGATTTCCAAGAGGCTCCCATACCTAGCTGCCCTGGCAGACTCCCAGGGAGGAAAAACAGCGTGGCCTTGGCA
GCTGCCCCAGGGAAGGAGGCCACAGGTGACAGGGAGAAGCCATTGCCATTCCCTGTCTGGCCCCCTTCAGCAAC
CCTGAACACTCTGCTCCAGCCAAGGTGGTGAGGGCAGCTGTTCTTAACACAGCGCAAAAGGCAGCAAGGTTGGTGAC
TTTGAGATGCAATCAATTGGCCCCACCTGGAGAGATAGCCCACAAGAGTGTTCAGCCACAGTCCCACAAGCCT
CAGCCTACCCGTAACTGCCACCCAAAGAGGACATGAAGGAACAGGAGAAAGGAGAGGGAGTGATAGTAAGGAG
AGTCCAAAACCAAAATCAGATGAATCAGGGGAGAAAAGAAATGGAGATGAGGATTGCCAGCGAGCGGGCAGAAG
AAGAAGGAACAACAACAAGTGGGTCCATTACAAATAGACATGAAGCCTGAAGTGCCAGAGAGAACTGGCT
TCAGCGCCCCACTCGCCCCACGGAGCCTAGACACATACCTGCCAATCGCGGAGAGATCAAAGGGTCTGAGTCTGCC
ACCTACGTGCCCTGGCCCCCCCCACCCACAGCCTGGCAACAGAGATCAAAACGGAGCCTGCCTGGCAGCAGCAG
GATGAGACATCGAGTGTGAAGAGTGATGGGGCTGGTGGGCGCGGGCTTCCTTCCGTGGCCGTGGACGGGGCGT
GGTCGGCGCGGGGACGCGGCCGGGGTGGCACTCGAACCATTITTGACTACAGTTTGGCTACCGAAAGTTTGAT
GGTGIGAGGGGGCCTGTACGCCCAAGTACATGAACAACATCACTACTACTTTGACAAATGTCAGCAGCACCGAG
CTTTACAGTGTGGATCAGGAATGCTCAAAGACTACATCAAGCGCCAGATTGAATACTACTTCAGCGTGGACAAT
TTAGAGCGAGACTTCTTCTGCGAAGGAAAAATGGATGCTGATGGTTTCTACCCATCACCTTATTGCTTCTCTTC
CACCGAGTGCAGGCCCTTACCCTGACATTTTCTCTCATCTTTGCGGCCCTAAAGGACAGCAAGGTGGTGAGATC
GTTGATGAGAAAGTTCGTAGGAGGGAGGAACAGAAAAGTGGCCTCTTCCCCCAATAGTGGATTATTACAGACT
GATTTCTCCAGCTTCTCAACTGCCCTGAATTTGTTCCCGTCAGCACTACCAAAAGGAGACAGAGTCCGCGACCT
GGCTCTCTCTCGTGCAGTCACCCCGATGCCAACCAAAAACAGAGAGGTGAGCAACCTAAAGACATACCCAAAGGGC
CTGTCTGCCAGCTGCCTGACCTGGATTCTGAGAACTGGATTGAAGTGAAGAGAGGCCCTCGGCCATCCCCAGCA
CGGCCCAAGAACTCAGAGGATCCAGATTTTCCACCCTGACCTCTCTGCCTCAGCAGCTGCCTTCCAGCAGCTG
ATGTCGAAGGATCAGGATGAGCAAGAGGAAGTGGATTTTCTGTTTGACGAGGAGATGGAGCAGATGGATGGGCGG
AAGAACACCTTCACTGCCTGGTCTGATGAGGAATCTGACTATGAGATTGATGACAGGGATGTCAACAGATCTCTC
ATTGTCAAGCCACACACATTTACATGCGCGGGCAGCCAGGGGGGGACCGCACAGGCAACCACTCTCGCTGCC
AAGATGAGCGCCGAATCGGCCAAGGTCTTAATGATGGCTCTTCTACTATGAGCAGGACCTGTGGGGTGAAAAG
TTTGAACTGAGTATTTCCAGATCAAGCAAGAGTGCAGAACTTCAAAAAGGTCAATATGATAGCCGGGAGCAG
TTTGACACACTGACCCCTGAGCCCCCTGTGGATCCCAACAGGAAGTTCCTCTGGGCCACCTCGGTTCCAGCAA
GTTCTACGAGTGCCTTGGCCAAACAGTGTGTTGGTGCTCTGAGCCCTCCACCATCGCCGCTCTCTACCAACC
ACTGTCCCAGAGTCAACCAACTACCGCAACACAGGAGCCCTCGCACTCCCCGGGACACACAGCTCAAAGACTCA
AGCCAGACATCACGGTTTATCCACAGTGGTGAAGAAGAGCGGACACTGGATGCCAAGATGCCCGAAAAAGAAAG
ACAAGACACAGTTCAAACCCACCTTGGAGAGCCATGTGGGCTGGGTGATGGATTCCCGTGAGCACAGGCCCCGT
ACTGCTTCCATCAGTATGGCCCCAGTGTGTGTTTCTGTTTCCCAAGCAAGCTTTGAGAGCCACTACCTA
TGACCAATGCTCTCTACTCCCTGCAGAGATGGCAGAGACTGCAAAATAGCGATGCTTTGAAGAAAAATACAAAT
GATCTTTGAACAACGAAGGCGGTGGGGTGCCAGCTGCACACAGTTGAAAATCCGTGTATACCTTTTACTCTCC
AAAAGCCTACTGTAAACAGAAGCCTTACCAATAACATATAGTCAATTAGCACATGTTTGCATATTATATGTAT
TACATACTGTATTTCTTACATAAGCTAAATAA

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FIGURE 1784

MKEQEKGE GSDSKESP KTKSD ES GEEKNGDEDCQRGGQKKKGKGNHKWVPLQIDMKPEVPREKLASRPTRPPEPRH
IPANRGEIKGSESATYVVPAPPTPAWQPEIKPEPAWHDQDETSSVKSDGAGGARASFRGRGRGRGRGRGRGGT
RTHFDYQFGYRKFDGVEGPRTPKYMNNITYYFDNVSSTELYSVDQELLKD YIKRQIEYYFSVDNLERDFFLRKKM
DADGFLPITLIASFHRVQALTDISLIFAALKDSKVVEIVDEKVRRRREEPEKWFLPPIVDYSQTDFSQQLNCEP
VPRQHYQKETESAPGSPRAVTPVPTKTEEVSNLKTLPKGLSASLPDLDSENWIEVKKRPRPSPARFKKSEESRFS
HLTSLPQQLPSQQLMSKDQDEQEELDFLDEEME QMDGRKNTFTAWSDEESDY EIDDRDVKILIVTQTPHYMRR
HPGGDRGTGNHSTRAKMSAELAKVINDGLFY YEQDLWAEKFEPEYSQIKQEVENFKKVNMISSREQFDTLTPEPPVD
PNQEVPPGPPRFQQVPTDALANKLFGAEPSTIARSLPTTVPESPNYRNRTRPTPTPTPQLKDSSQTSRFYPVVK
EGRTLDAKMPRKRKTRHSSNPPLSHVGVWVMSREHRPRTASISSPSEGTPTVGSYGCTPQSLPKFQHPHSHLL
KENGFTQHVYHKYRRRCLNERKRLGIGQSQEMNTLFRFWSFFLRDHFNKKMYEEFKQLALEDAKEGYRYGLECLF
RYYSYGLEKKFRLDIFKDFQEETVKDYEAGQLYGLEKFWAF LKYSKAKNLDIDPKLQEYLGKFRRLDFRVDPFM
GEEGNHKKRHSVVAGGGGGEGRKRCPSQSSSRPAAMISQPTPTPTGPVREDAKWT SQHSNTQTGLK

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FIGURE 1785

GGCACGAGGGGAAGAGCTCCCACCTTCTCTGGATGTGCTGGGCTTGGACTGGCTAGAATCTTTCTCTGGACTGTT
GCATGTACAGTGGCTCCATCTCTGGAGGCAAGAGAGTGGGAGTGGCTCGAATCAGAGCCGTGCCAAGATATCCC
TGCTGTGTGATCGTTTGAAGCTGACGTCTCTGTGTACACTGCTGCCACTGTGTGTCTCTCGCTCTGCTGTCT
GTTGCTCTACGCCAGGCCCGCTCTGCGGTGACACCCCTTCATCTACCCCTTGAACCCCAAGGCCAAGTTGGTTTC
AAACTGTTGGAGAACAGAGTTGGCCTGCATCTGGAACACACTTGTCTCAGCTTACCATCTCTCACACCCCCAGA
GTGGAAAGGTGAACACCTGCAGCTGAGGCTTGGAAACGTTTCTGTGTGTGCTGAAATCTTTGAGACCTCAG
GGAGGCTCTGTCTCTCTTAAAGGTGGAGAAAGATGCCATTCTCTCCCTAAGGTCTGGTGGAGTCTCCCCATCTT
GCATACCTTCTCTCAAGCCATCTATCTCTGCTCACTCTCCAATTGACCCGCCCTGGGAACAGGGATGAGGAGGAG
TTGGGGCTGGGGGGAATCCTGCCAGTTGGTGAAGCCCTGTGGCAGGAAGGTATATGTGGACATAGAGTATACCT
GATTCTCTTTCTTCAGCCACTGACTGCTTGGGTGGGCTGTGAATGATAATGGAATGGCTGGAGTCTGCTGTGT
CAGAAGGCAGGGAGGGTGATGAAGGACTGACCCACATGGACTGGGATGTGTCTGGTTATGGGCATGACTGCACG
TTCACCTCTCAGTGGGATCTGGGCAACATGGAGTTCAITGTCTGTTGCTTACTTACTGCAATGTCITTTGGCCCTC
CTTTTCAACTGGTTCCTCTGTGTGGGCCAAAGGTTGGGAGTAGGAGACAGTATCCCAGGCTGACAGGGCTTGCC
CTTTACCTTGGGCACCTTGTAAATTTTTAGCCTGTGCCCTTCCCCACCTTTGCCCTCCCAGTGGTGGTATGTGG
GAAGCCCATCTCAGTTCCTGTGACTTCATGTCTCAAAACCAAGGATGAGCGTCTGGTCTCTGCTATGATGGTGGTA
TCCGAGGCCCTTCCCTGCCAGCTGGTGGCTGCCCCACATTGTACCGGACACTGGATTCTGGACCCCTTCTC
CTTTCTCTTTCTTCTTCAGGTACGCAGCCCTGTACTGTATCCAGCACCACAGAAACCTCAGTGTTTTTCTCTC
GCTGGTTTGGGGCACAAGGAAGCCTTAGGGTATGGGGAAGGCTGTTATTACCTAGAGTTTACTCCCAGGCCAGG
GGGCTGCCATCTTCTTCAGACAGATCCCTGAAAGGAAGCCCTTTGGGGCAGGGAGTGAGGACTTCATCTCAAC
ATCGGCTGGTGGTGGTAGGGGAGCTTTTTCTTTTCTTCTTCTTTTGTGTTTTGTTTTGTTTTGTTTTGTTTTG
GTAACATGTTAGGAGTTAATGTTGCAAGAGTAGTTTACATCTTCACCTTCTGAAGACACTTGAATTTAGGACCG
ATGTATCTGTGACAAGCATGCCAGAAGTGGCAGGGGCCATCAGGGCTAACCACTTCACACCTTACCATCGTCCCAT
GGGATCCAAGACCTTGAGATAAAGCAACAGCCTGCCAGATCCCTCTGTTCATCTCTATCCCTTCCAAGGTTGGTC
CATGCCAACAATACCTCTGGGCATCAGACATCAGCAGGCTGTGTGCTCAGCCCTGTATAAGGGGCAGGTTTCTC
TTTAGCCCTCTTCTGCACTTGGGAGCAAGGCACTACCAGTAGAGAAGGGCCATCCAGCCGTGCCCCAGCCTGG
ACCCCTGGGGCTCAGATAGAGGTGCTGAGCCCTGTGTCAAGTTGTTAAATGTTTTGTTTTGTTTCCATTGTAG
CTCTTTTTTTTTTTTTTCCCTTCTCTGGTGATTGATTTTCAAAAAGAAAGTAAGCTGCTTAGAAGGCCCTGGAAGG
GAAGTGAGGAGAGGACAGGAAGATGACTAGTTACGGAGGGTGAAGGTTGTTTTTGCCAAAAGCCTGGGTA
GAGTGATCTGAATTCTCTGGCACCTCTCGAATGGAACCCACAGATACCTCTGTGTGGGAAGGGTCCCTGGAATT
TCCCTAACACCCACCCCTCTCCCCCTTCAGCCATGCTGATGGCAGAGAAGATAAGAAGTTGGAGCCCATTTCTCAC
TGGAGAGGAAACCTTGTATCTGGCTTTGCGGAGAAGGTTCCACCTTACGCTCTGAGTACATTATCTTTACTATG
TGCTAGGATATCATATTTAAAGGACAAAAAATGTAAAAATCTTGAATGAGCTGTGATTAACAATTAATATTA
TGAAGATATCTGCTTCCAGGCTGAAGTGATTCATTCAATTCTAGTCCTGCTTTAGTCCTTGTAAATTGTTG
GTAATTATGCTTTCTTTTAAATCAAAAAATGTATAAAAAAACAACCTTGAAGAGGCAAAAAA

AA

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FIGURE 1786

MLGVNVAKSSLHLHFLKTLFRITDVSVTSMPEVAGAIRANHFTPTIVPWGSKT

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FIGURE 1787

GC GGTCTTATATAAGCCAGATCCG CAGGGGAGTCCGCAGAAGGGTTAAACAGGTCTTTGGGCTTCGGCGACCTCG
CCCCGGCGAGAAACCGGTAAAGAAGACAGTGGGCTGC GCGTCTCATTTTCAGCCTTGCCCGGACTCTCCCAAAGCC
GGCGCCCACTAGTGGCTCCAGAGCCCAACAGGTGGCCCCGGCAGTCTCTGGGGCGCATGGAGCGGCGTTAATAGG
GCTGGCGGCGCAGGCCAGTAGCCGCTCCAACATGAACCTCGTGGGCAGCTACGCACACCATCACCACCATCACCA
CCCGCACCTTCGCACCCCCATGCTCCAGCAACCTTCTCTTCGGTCCGGGCTCGCGCTGTCTATCAGGAAAGGCC
CTACTTCCAGAGCTGGCTGTGAGCCCGGCTGACGCTGCCCGGACTTCCCTGCGGGCGGGCCGCCGCCCGCGG
CGCTGCAGCGGCACCGCCTATGCTGCTGACGCCAGGCTGGGCAGAGCCCGGGCGGCTGGAGGCGCTTGGCGG
CCGCTTTGGCGCGGCGGAAAGGCTCAGGACCCAAGAAGGAGCGGAGACGCACTGAGAGCATTAACAGCGCATTCGC
GGAGTTGCGCGAGTGCATCCCCAACGTGCCGGCCGACACCAAGCTCTCCAAGATCAAGACTCTGCGCCTAGCCAC
CAGTACATCGCCTACCTGATGGACGTGCTGGCCAAGGATGCACAGTCTGGCGATCCCGAGGCTCTCAAGGTGA
ACTCAAGAAGGCGGATGGCGGCCGTGAGAGCAAGCGGAAAAGGAGCTGCAGCAGCACGAAGTTTTCCTCCTGC
CCTGGGCCCACTGCAGAAAGGATTAAAGGACGCACCGGCTGGCCGCAGCAAGTCTGGGCGCTGGAGTTAAACCA
GTGAGCCGAGGGCCCGCGCCGAGGACCTGGCCAGGCCAGCCACTCCTGAAGCCCCGGGAGGAGAGGAAGGCAGCGG
CGAACGCCAGGCTCTGGGCTCCGGCGACTGGTGTCTACGCATCCCGGGAGCTTCTGCTGAGCGCCGCGAGGTCTGT
CGGCTGCAACCACACACTTGGATCGCAGCTGCAATGTCTTTGATTTTTTTTAAATACATTAAAGAGAAAGAGAAAT
ATATATATATCCACCCCCAGCCCAACCGAGGGCGGCCCTTGGCGGCAACATGCAAGAAGGAGGACTGTCCGAACC
CAAGGGCTCAAAGACGCACCTTCCACCTTTTGGAGCGAATTGAACCTCAGCCCTATCTCCATTTCCTATC
TGGCTCTTTCTCTCTTGTCCCTCCATATGATCCGCCCGACGCGCTTCTCTAATTAATGCAATAAGGAATC
AATTCTTTTCTTGCTGAGAAAGAGAACCAAGACGCAAGGAAGTAAAGGCTGCCCTTTGTTCTTCGAATCGTGGT
GGTTTATTTTATTTTCTTTTGTGCTGCACCTTCTGTTTAGTTCCAAAGGGAACACTTCTCTCTTTCTCTG
TCTCTCTCTTTCTTCTTTCTTTCTTTCTTTCTTTGTTTCTATCTAAATAAAAGCTTTCCCTGTGTTGGAAGTT
TTTATGTATTTAAACTACCTACCATGCCTGTTGTGCTCAGGTGTTTGTTCATCTGCCATCCCCAACCTTTCT
ACCTCAAGTCTGTGACCACTACAGCCCCCTCCCTTCGCCAAGCAGTGTCTATGCTCTTGATTAATAAAAC
ATTTCTGAAATCAAAAAAAAAAA

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FIGURE 1788

MNLVGSYAHHHHHHPAHPLHEPFLFGPASRCHQERFYFQSWLLSPADAAPDFPAGGPPAAAAATAYGPD
ARPGQSPGRLEALGGRGRLGRRKGSGPKKERRRTEINSFAELRECIPNVPADTKLSKIKTLRLATSYIAYLMDVL
AKDAQSGDPEAFKAELKKADGGRESKRKRELQQHEGFPPALGPVEKRIKGRTGWPQQVWALELNQ

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FIGURE 1789

ATGCAC TATTCTAAGGAATATAGGCAGATGTACAGA ACTGAAATTCGAATGACAAGGATGGCAAGAAAAGCTGGC
AACTTCTATGTACCTGCAGAACCCAAATTGGAGTTTGTCA TCAGGATCAGAGGTATCAATGGTGATCAGATTCA T
AAGATCTATACTGTGGAAAAACGCTTCAAGAAGCAAATAACTTTCTGTGGCCCTTCAAATTACCTTTCCACCA
GGCAGAGTGAAGAAAAAGACCAC TTATTTTGTAG AAGGTGGAATGCTGGCAACAGGGAGGACCAGATCAACAGG
CTTATTAGAAGAAATGAACTAA

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FIGURE 1790

MHYSKEYRQMYRTEIRMTRMARKAGNFYVPAEPKLEFVIRIRINGDQIHKKIYTVGKRFKEANNFLWPFKLPFPF
GRVKKKTTYFVEGGNAGNREDQINRLIRRMN

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FIGURE 1791

GATCAGGGCCGAGTTGTCTCGGCGGCGCTGCCGAGGCCITCCACCAGGACAGTCCCOCTCCCGGGGCTCTCTCC
TCTTGCTACGAGTCCCTCTCCCTCGTAGGCCTCTCGGATCTGATATCGTGGGGTGAAGTGAAGGAGCCGGGGA
GGGTGGTTACCGCTGAGGAGCTGCAGTCTCTGTCAAATGATAGAGGTACTGACAACAACCTGACTCTCAGAACT
GCTACACCAGCTGAATGCCCTGTGGACAGGAGTCTAGATGTCAGCCAAAGGTCTGTGGTTTGAGACTAATTGA
GTCTGCACACGATAATGGCCCTCAGAATGACTGCAAGACTAAGGGACTTTGAAGTAAAAGATCTCTTAGTCTAAC
TCAGITCTTTGGCTTTGACACAGAGACATTTTCTCTAGCTGTGAATTTACTGGACAGATTCCTGTCTAAAATGAA
GGTACAGCCCAAGCACCTTGGGTGTGTGGACTGAGCTGCTTTTATTTGGCTGTAAAATCAATAGAAGAGGAAAG
GAA TGTCCATTGGCAACTGACTTGATCCGAATAAGTCAATATAGGTTTACGGTTTCAGACTTGATGAGAAATGGA
AAAAGATTGTATTGGAGAAGGTGTGTGGAAAGTCAAAGCTACTACTGCCITTTCAATTTCTGCAACTGTATTATTC
ACTCCTTCAAGAGAACTTGCCACTTGAAAGGAGAAATAGCATTAAATTTTGAAGACTAGAAGCTCAACTGAAGGC
ATGTCATTGCAGGATCATATTTTCTAAAGCAAAGCCTTCTGTGTGGCATTGTCTATCATTGCATTAGAGATCCA
AGCAGAGAAGTGTAGAGTTAACAGAAAGGAATAGAATGTCTTCAGAAACATTCCAAGATAAATGGCAGAGATCT
GACCTTCTGGCAAGAGCTTGTATCCAAATGTTTAACTGAATATTTCAATAAAGTGTTCCAAACCAATGTTCA
GAAGTGAATGGATTGTTTCTGGGCGTACTGCACGGCAATTGAAGCATAGCTACTACAGAATAACTCACCTTCC
AACAATTCCTGAAATGGTCCCTTAACTGGATTATTACAGCACCAAAAACTTCTCTGAAGCCTTTCTCCACARCC
TTGTCTATGGATTCCATAATGTTACAATGGATTAAAGCTATGAAGCCTCAAAACATCAGAGATAAGCATGATG
GTCTCAGACTTGGGAAAACCTGCCTAATATTATGCTGTAGTGGAATTATGTTATGATTGAATTCATCTGTGAAG
GCATTCAATCAAAGCTAAAAGCCTAAATGTAATGCTAATGACAAGCCTGAGAAGGTAAACTATGAATCTTCA
TTTCTATCATTGATCTAACTTTAGATATTGGATCAATATATTTAGGTGGTATTGAAAATGCTATTGGAGGAGTCA
CACTAATACTATCAACTATCAGTCTTCCACAGCTTCAATCACTGTCAATTCTTAATCCTACTCTACTTAAAT
TTTAAATTATGAGGTTTATGTGCGAAAGCAACATTTACAAATGTACTTTTAAAGGCATAATAAGGTTAACATTC
AGG

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FIGURE 1792

MIEVLTTTDSQKLLHQLNALLEQESRCQPKVCGRLRLIESAHNDNGLRMTARLRDFEVKDLLSLTQFFGFDITETFSL
AVNLLDRFLSKMKVQPKHLGCVGLSCFYLA VKSIEEERNVPLATDLIRISQYRFTVSDLMRMEKIVLEKVCWKVK
ATTAFOFLQLYSSLQENLPLERRNSINFERLEAQLKACHCRIIFS KAKPSVLALSTIALEIQAKCVELTEGIE
CLOKHSKINGRDLTFWQELVSKCLTEYSSNKCSKPNVQKLKWIVSGRTARQLKHSYYRITHLPTIPEMVP

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FIGURE 1793A

GTAGAGTTAAGGAAGGGCCCTTCTCCTGTGTGAGAAATTCAGCATTTTGAACCATCCAAAAATGTTGAGGGCATGC
TTTGCTTCCAGGGCAGACAGCAGCAGCTGAGCATGGGACACAGGATCCCTGACTTGCTGTGTGCCCTTAAAC
CAGCCACTACCTCTCTGACGTTCAAATTTGAGCAATGGAAAGCGACGCTGCCCACTGTTACTCCGCTGTATCAT
GAAAGCCTGCGGATGAGTGGCAGAATACAGAACTGCAGCCATGACCACGCACGTACCCCTGGAAGATGCCCTGTC
CAACCTGGACCTGCTTGAAGAGCTTCCCTCCCCGACAGCAGCCATGCATCGAGCCTCCACCTTCTCCATCAT
GTACGAGGCTAACTTTGACACAACTTTGAGGACAGGAATGCTTTGTGACGGGCATTGCAAGGTACATTGAGCA
GGCTACAGTCCACTCCAGCATGAATGAGATGCTGGAGGAAGGACATGAGTATGCGGTCATGCTGTACACCTGGCG
CAGCTGTTCGGGGCCATTCCAGGTGAAATGCAACGACGAGCCCAACCGATGAGATCTATGAGAAGACAGTA
GAGGTCTGGAGCCGGAGGTCACCAAGCTCATGAAGTTCATGTAATTTTCAGCGCAAGGCCATCGAGCGGTCTGTC
AGCGAGGTGAAGCGGCTGTGCCATGCCGAGCGCAGGAAGGACTTTGTCTCTGAGCGCTACCTCTGACCCCTTGGC
AAGTTCATCAACATCTTTGCTGTCTGGATGAGCTAAAGAACATGAAGTGACGGTCAAGAATGACCACTCTGCC
TACAAGAGGGCAGCACAGTTCCTGCGGAAGATGGCAGATCCCCAGTCTATCCAGGATGCGAGAACCCTTTCATG
TTCTTGCCCAACCAACACAGGATACCCAGTGTCTCCACAGCAACTTGAAGTGATCCAGGCTATGAGGAGCTG
CTGGCTGACATTTGCAACATCTGTGTGGATTACTACGAGAACAAGATGTACCTGACTCCAGTCTGAGAAACATATG
CTCCTCAAGGTGATGGGCTTTGGCTCTTACCTAATGGATGGAATGTCACTAATTTACAACCTGGATGCCAAG
AAGAAATTAATCTTGAACAAATGTATAAATTTCTTAAGCAGCTGCGAGGTGGCGCCCTTTTCGGCGACATCGAG
ATAGAGCTGGCCAGATACATTAAAGCCAGTGCTCACTATGAAGAGAACAAGTCCAAGTGAGCGTGCACCCAGAGC
AGCATCAGCCCCAGTACAATATCTGCGAGCAGCATGGTTTCAGATCCGGGATGACCACATCCGCTTCATCTCCGAG
CTCCTCGCTACAGCAACAGTGAAGTGGTGGTACGGGCTCAGGGCTGGACAGCCAGAAAGTCAGACGAGGATGATCGC
GAGCTCTTCGACCTAGCCCTGCGGGGCTGCGAGCTTCTATCCAAGTGAGGCGCCACGCTATGGAGGTGTACTCT
TGGAAGCTGGTTCAATCCACAGACAAAGTTCGCAACAAGGACTGTCTGGACAGCCGCGGAGGAATATGAGAGGCC
ACAGCTACAATTAACACAGTGAAGGAAAAATTTGCTTCGTTGAGGTGATGCCATGATCAAGGCCCTGCAAGGTG
CTCATGGGAGGATGGAGAGCGCTCTTAACACAGGCCATCAGGAACACCATCTACGCGGCTATGCAAGGACTTCGCG
CAGGTGACGCTGCGTAGCCCTGCGGAGCGGCTACGGAAGAAAGAAATGTCTCATCAGCCTCTACAGGCA
ATTCGAAAGACCATCTGTGACTGGAGGGAGGGCGAGAGCCCCCTAATGACCCATGCTTGAGAGGGGAGAAGGAC
CCCCAAGGTGGATTTGATATCAAGGTGCCCCGCGCTGCTGTGGGGCCATCCAGCACACAGCTGTACATGCTGCGG
ACCATGCTTGAATCACTCATTTGCAGACAAAAGCGGCTCCAAGAAAGCCCTGAGGAGCAGCCTGGATGGACCCATT
GTCTCGCCATAGAGGACTTTTCAACAAAGTCTCTTCTTTCACACATCTGCTCAACATCAGTGAAGCCCTCGAG
CAGTGTGTGAGCTCTCCGAGCTCTGCTTCCGAGAATTTCTCTGGAATTAACATGGGCCCCAGCAATCCAGTTC
CCCATCGAGATGTCATGCCCTGGATTCTAACGGACCATATCTCGAAACCAAGAACCCTTCATGATGGAGTAT
GTCTCTTACCTCTGGATCTGTACACAGCAGCGCCTACTATGCTCTGACCAAGTTTAAAGACAGTTCCTGTATC
GATGAGATAGAGCTGAGGTGAACCTGTGTTTGTGACAGTTTGTCTCAAGCTGGCAGCCAGATCTTGTCTTAC
TACAAGGCCATGGCTGGCAGATGCTCTTGGATAAACGTTTTGAGCTGAGTGTAAAGATTTAGCGCTATCATTT
CCGATATCCACCGTCCAATTCCTATGAACACTGCTGAAGCAGAGACAGTCCAGCTGTGGGTAGATCAATTGAC
TTGAACAGACTCATTACCCAGCGCATCTCTGCCGCATGTATAAATCCTTGGACCAAGCTATCAGCCGCTTTGAG
AGTGAGGACTGACCTCCATTGTGGAGCTGGATGGCTGCTGGAGATTAAACCGGCTCAGCGATCGGCTGCTCTGT
AAGCATATGACCTGGACAGCTTCCATGCCATGTTCCGAGAGGCCAATGACAATGTGTGTCGCCCTTATGGCGGT
ATCACCTCGATGTTCTTCTGGGAATGAACTTTGACTTTCTCCCCAATCTAGCTACAATGGGTCCACATCAACGT
TTTGTGCGGACTGCCATTTCTTTACCCAAAGAACCAACAGACAAACCTGCTGACCTGACGCTTATTACCTC
TATGGATCCAAGCCTTCAACATTGCCTACAGCCACATCTACAGCTCCTACAGGAATTTGTTGGGGCCACCTCAT
TTCAAGACTATCTGACAGCTCCTGGGTATCAGGGCATCGCTGTGGTCAATGGAGGAACCTGCTAAAGATTGTGAAG
AGCTTGTCTCAAGGAACCATTTCTCCAGTATGTGAAGAACTGATAGAGGTGATGCCAAGATATGCCGCTTGCCC
CGACATGAGTATGGCTCCCGAGGATCTGGAGTCTCTCCACCACAGCTGAAGGACATCATTGATACCGACAGCT
CTCAAAAACAGAGCTGTTCCAGAGCTGAGGGAAGTGGGCAATGCCATCCTCTCTGCTCTCATAGAGCAAGCT
CTGTCTCAGGAGGAGTCTGCGATTGCTCCATGCGCGACCCCTTCCAAAACATCTTGCTTAGAGTCTACATCAAA
GAGGGGGAGCGGCTGGAGGTCCGGATGAACGCTCTGGAAGCCAAAGTATGCCCGCTACACCTTGGTCTCTGATC
GAGCGGCTGGGAGCCCTCAGGACATGCCATTGCTGCGAGGGTGACTCTTCCAGCAAGGACGGGCTGTGCTGTG
GGCTGTCCATGTTGAGGTATCTTGACCCGATCTCGAGCTACCTGACGAGACCCCATCTGCGGGGGCCACCG

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FIGURE 1793B

CCCACCAATGGCGTCATGCACGTCGATGAGTGTGTGGAGTTCCACCGGCTGTGGAGCGCCATGCAGTTCGTGTAC
TGCATCCCTGTGGGAACCAACGAGTTCACAGCTGAGCAGTGTTTCGGCGATGGCTTGAAC TGGGCTGGTTGCTCC
ATCATTGTCTGCTGGGCCAGCAGCGTCGCTTTGACCTGTTGCACTTCTGTTACCACCTGCTAAAAAGTGCAGAGG
CAGGACGGGAAGGATGAAATCATTAGAATGTGCCCTGAAGAAGATGGCCGACCGGATCAGGAAGTATCAGATC
TTGAACAATGAGGTTTTTGCCATCCTGAACAAATACATGAAGTCCGTGGAGACAGACAGTTCACCTGTGGAGCAT
GTGCGCTGCTTCCAGCCACCCATCCACCAAGTCCTTGGCCACCACTTGCTAAGCAGAAGATCCTGCAGACCTTAT
CTGGAGGAGGAAGAGAAGCAGGAGAGAGAAAGCCACAGCCAGCCTGCCATAGGATCCAAC TGGACAACGTGTGGG
ATGGACCTGGAACAAGCACCTCCCCAACACATCACCACTCCCTAGGGCGGGGCTGTGCATGCTCTCCCATGA
CATCTCCATGCTGGTTTCTCCATAGCATAAATGAAAAAAAAAAAAAAAAAGTAAACAGGGCAGTGTGTGCTTTT
CTTTTCTCCCCCTCAACTATATTAAAGAACTCCTAGTTTACCCCTTCTCCATCCCATCATCCACCTATCTGTG
GTTGCTTCCCAAGACCT

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FIGURE 1794

MKFMYFQRKAIERFCSEVKRLCHAERRKDFVSEAYLLTLGKFINMFAVLDELKNMKCSVKNDHSAYKRAAQFLRK
MADPQSIQESQNLNMFANHNRIQTCLHQQLEVIPGYEELLADIVNICVDYYENKMYLTPSEKHMLLKVMGFGLY
LMDGNVSNYIKLDAKKRINLSKIDKFFKQLQVVPLFGDMQIELARYIKTSAHYEENKSKWTCTQSSISPQYNICE
QMVQIRDDHIRFISELARYSNSEVVTGSGLDSQKSDEEYRELFDLALRGLQLLSKWSAHVMEVYSWKLHVHTDKF
CNKDCPGTAEYERATRYNYTSEEKFAFVEVIAMIKGLQVLMGRMESVFNQAIRNTIYAALQDFAQVTLREPLRQ
AVRKKKNVLISVLQAIKRTICDWEGGREPPNDPCLRGKDPKGGFDIKVPRRAVGPSSTQLYMVRTMLES LIADK
SGSKKTLRSLDGPVLAIEDFHKQSGFFTHLLNISEALQCCDLSQLWFEFFLELTMGRIQFP IEMSPWIL
TDHILETKEPSMMEYVLYPLDLYNDSAYYALT KFKKQFLYDEIEAEVNLCDFQFVYKLADQIFAYYKAMAGSVLL
DKRFRAECKNYGVIIIPYPPSNRYETLLKQRHVQLLGRSIDLNRLITQRISAAMYKSLDQAISRFESEDLT SIVEL
EWLLEINRLTHRLLCKHMTLDSFDMFREANHNVSAPYGRITLHVFWELNFDPLPNYCYNGSTNRFVRTAIPFTQ
EPQRDKPANVQPPYYLYGSKPLNIAYSHIYSSYRNRFVGP PFKTTICRLLGYQGIADVMEELLKIVKSLQGTILQY
VKTLIEVMPKICRLPRHEYGSPGILEFFHHQLKDIIEYAE LKTDVFSQLREVGNAILFCLLIEQALSQEVEVCDLL
HAAPFQNILPRVYIKEGERLEVRMKRLEAKYAPLHLVPLIERLGT PQQIAIAREGDL LTKERLCCGLSMFEVILT
RIRSYLQDP IWRGPPPTNGVMHVDECVEFHRLWSAMQFVYCI PVGTNEFTAEQCFGDGLNWAGC SIIVLGQQR
FDLDFDCYHLLKVRQDQDKDEI IKNVPLKKMADRIRKYQILNNEVFALNKMYSVETDSSSTVEHVRCFQPP IHQ
SLATTC

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FIGURE 1795

GCGGCCTCAGATGAATGCGGCTGTTAAGACCTGCAATAATCCAGAAATGCTACTCTGATCTATGTTGATAAGGAA
AATGGAGAACCAGGCACCCGIGTGTTGCTAAGGATGGGCTGAAGCTGGGGTCTGGACCTTCAATCAAAGCCTTA
GATGGGAGATCTCAAGTTTCAACACCAGCTTTTGGCAAAACGTTTCGATGCCACCAGCCTTACCTAAAGCTACT
AGAAAGGCTTTGGGAACGTGTCAACAGAGCTACAGAAAAGTCTGTAAAGACCAAGGGACCCCTCAAACAAAACAG
CCAAGCTTTTCTGCCAAAAAGATGACTGAGAAGACTGTAAAGCAAAAAGCTCTGTTCTGCCTCAGATGATGCC
TATCCAGAAATAGAAAAATTCTTCCCTTCAATCCTCTAGACTTTGAGAGTTTTGACCTGCCTGAAGAGCACCAG
ATTGCGCACCTCCCCITGAGTGGAGTGCCCTCTCATGATCCTTGACGAGGAGAGAGAGCTTGAAAAGCTGTTTCAG
CTGGGCCCCCTTCACTGTGAAGATGCCCTCTCCACCATGGGAATCCAATCTGTTGCAGTCTCCTTCAAGCAIT
CTGTCGACCTGGATGTTGAATTGCCACCTGTTTGCTGTGACATAGATATTTAATTTCTTAGTGCTTCAGAGTT
TGTGTGATTGTATTATAAAGCATTCTTCAACAGAAAAAAAAAAAAAAAAA

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FIGURE 1796

MATLIYVDKENGEFGTRVVAKDGLKLGSGPSIKALDGRSQVSTPRFGKTFDAPPALPKATRKALGTVNRATEKSV
KTKGPLKQKQPSFSAKKMTEKTVKAKSSVPASDDAYFEIEKFFFPNLPDFESFDLPFEEHQIAHLPLSGVPLMILD
EERELEKLFQLGPPSPVKMPPPWESNLLQSPSSILSTLDVELPPVCCIDI

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FIGURE 1797

ATGGCCCTGGAGTTTCTCCCTCAGACTAAGAACCATCCACCAGTAGCAGAACTACATCCTCAGGGGGGGTTTC
TTCGTGAATGCAAATGTCCCGGCACCTAAACGGTTCACATTACCGCAGGTGATTTCTGCAGCTGTAACAAAGTTC
CATCCTCAGCAAGAATCAGAACCACCGAGACAGAGCAGAGAGACCCATGCCCTCACTTGCAGAGTTCAAATG
GCACCTTTCTTGAAAAAGAAGATTGGGTGTTACAGCTTTCTGAGCAACAACGATACAAAGTGGATGCAATTCAT
CCATCGTCTCTGAAAAGTCTTCGACCATTGCATGAGATTGTAGAGGAAGACAGGCACAGGAAGACCAACAGCGT
GTAGAGGATACGAAGATTGGCTACCCAACCTGTTGCATCAGTACCCCATTTCTATCATCAACGGGTACAAACGAGTC
CTGGCCTTGTCTGTGGAGACGGATTACACCTTCCCACTCGCTGAAAAGGTCAAGGCCTTCTTGGCTGATCCATCT
GCCTTTGGCTTTGATGTTTCAAGCAATGCTGGGTCAACCCAACCACTCAGCACATTCACTGGACCTGGTCTGCC
CAAGCTCCTCCACTGCATGATTCAAGTTGAGATAG

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FIGURE 1798A

GCAACTGGACAACAACCACATCAGCTGCATTGAAGATGGAGCCTTCCGAGCGCTGCGCGATTGGAGATCCTTAC
 CCTCAACAACAACAACATCAGCTGCATCCTGGTCACAGCTTCAACCACATGCCGAAGATCCGAACCTCTGCGCCT
 CCATCTCAACACACCTGTACTGCGACTGCCACCTGGCTCTCGGATTGGCTGCGACAGCGACGGACAGTGG
 CCAGTTCACACTCTGCATGGCTCCTGTGCATTGGAGGGGCTTCAACGTGGCGGATGTGCAGAGAAGAGGATACGT
 GTGCCAGCCCCCCTCTCGGAGCCCCATCCTGCAATTGCCAACTCCATCTCCCTCGCCTGCCCTGGCAG
 CAATTAACATCTGGAGCTGTGAGGAAAGGGCTTGTAGAGATTCTTGCCAACTTGGCGGAGGGCATCGTCGAAAT
 ACGCTTGAACAGAAGCTCCATCAAGGCCATCCTGCAGGAGCCTTCAACAGTACAAGAACTGAAGCGAATAGA
 CATCAGCAAGAATCAGATATCGGATATTGCTCCAGATGCTTCCAGGGCTTCAAACTCATCTGCTGCCCTGCCCTGGCAG
 GTATGGGAACAAGATCACCAGATTTGTCAAGGAGCTGTTTGTATGGGCTGGTGCTCCATCAGCTGCTCTCTCAA
 TGCCAAACAAGATCAACTGCTGCGGGTGAACACGTTTACGAGCCTGCAGAACCTCAACTTGTCTCTCCCTGTATGA
 CAACAAGCTGCAGACCATCAGCAAGGGGCTCTTCCGCCCTCTGCAGTCCATCCAGACACTCCACTTAGCCCAAAA
 CCAATTTGTGTGCGACTGCCACTTGAAGTGGCTGGCCGACTACCTCCAGGACAACCCCATCGAGACAAGCGGGG
 CCGCTGCAGCAGCCCGCGCGACTCGCCAAACAAGCGCATCAGCGAGATCAAGAGCAAGAAGTTCCGCTGCTCAGG
 CTCGAGGATTACCGCAGCAGGTTACAGCAGCAGTGTTCATGGAGCTCGTGTGCCCGGAGAAGTGTGCTGTGA
 GGGCAGGATTGTGGACTGCTCCAACGAGAAGCTGGTCGATCCTCAAGCCACCTCCCTGAATATGTCACGACCT
 GCGCATGAATGACAATGAGGTATCTGTTCTGGAGGCCACTGGCATCTTCAAGAAGTTGCCCAACCTGCGGAAAAAT
 AAATCTGAGTAACAATAAGATCAAGGAGGTGCGAGAGGGAGCTTTCGATGGAGCAGCCAGCTGCGAGGACGTAT
 GCTGACAGGGAACCACTGGAGACCGTGCACGGGCGGTGTTCCGTGGCTCAGTGGCTCAAACCTTATGATCT
 GAGGATTAACCTGTATCGGCTGTGTGAGTAATGACACCTTTGCCGGCTGAGTTCGGTGAGACTGTCTGCTCTTA
 TGACAATTCCGATCACCACCATCACCCTGGGGCTTCAACACGCTTGTCTCCCTGTCCACATAAACCTCTCTGTC
 CAACCCCTTCAACTGCCAAGCTGCCACTTGCCCTGGCTGGCTGCGGACAGTGTGAGGAAGAGGCGGATCGCTGAGTGGGAA
 CCTAGGTGCCAGAAGCCATTTTCTCAAGGAGATTCCTATCCAGGATGTGGCCATCCAGGACTTCACTGTGA
 TGGAACGAGGAGAGTAGTGTGCCAGCTGAGCCCGGCTGCCCGGAGCAGTGCACCTGTATGGAGACAGTGGTGCG
 ATGCAGCAACAAGGGGCTCGAGCCCTCCCAAGAGCATGCCAAGGATGTGACCAGCTGTACCTGGAAGGAAA
 CCACCTAACAGCCGTGCCAGAGAGCTGTCCGCCCTCCGACACCTGACGCTTATTGACCTGAGCAACAACAGCAT
 CAGCATGCTGACCAATTACACCTTACGTAACATGTCACCTTCCACTGTGATCTGAGCTACCAACCGGCTGAG
 GTGCATCCCCGTCCAGCCTTCAACGGGCTCGGCTCCTCGGAGTGCTAACCTCCATGGCAATGACATTTCCAG
 GCTTCTGAAGGCTCCTTCAACGACCTCACATCTCTTTCCATCTGGCGCTGGGAACCAACCCATCCACTGTGTA
 GACAGTCTTCGGTGGCTGTGCGAGTGGTGAAGCGGGGTACAAGCGGCTGCTGACCTGCTGCCGCTGCGATAGCCC
 TGAGCCCATGGCTGACAGGCTCCTGTGCTCAACCCCAACCCACCGCTTCCAGTGTGCAAGAGGACCATGGACATCAA
 CATTGTGGCCAAATGCAATGCCCTGCCCTCTCCAGCCGTGCAAGAATAACGGGACATCACCACCGGCTGTGGGA
 GCTGTACCGCTGTGCTTGCCTTACAGCTACAAGGGCAAGGACTGCATGTGCCCATCAACACCTGCATCCAGAA
 CCCCCTGTACAGATGGAGGCACTGCCACCTGAGTGACGCCACAGGATGGGTTCAGCTGCTCCTGCCCTCTGGG
 CTTTGAGGGGAGCGGTGTGAGATCAACCCAGATGACTGTGAGGACAACGACTGCGGAAACATGCCACCTGCGT
 GGACGGGATCAACAACATACGTGTGTATCTGTCCGCCTAACACAGGCTGAGCTATGCGACAGGATGATTGACCA
 CTGTGTGCTGAGCTGAACCTCTGTGACATGAGGCGAAGTGCATCCCTGGACAAGGATTACGCTGGGAGTG
 TGTCCCTGGCTACAGCGGGAAGCTCTGTGAGACAGACATGATGACTGTGTGGCCCAAGTGCCGCCACGGGGC
 CCAGTGGCTGGACAACATAAATGGCTACACATGCACCTGCCCCAGGGCTTCAGTGAACCTTCTGTGAACACCC
 CCCACCATATGGCTTACTGACAGACGCCCATGCGACAGTACGAGTGCCAGAACAGGGCCCACTGATCTGGT
 GCGACGAGAGCCACCTGCGCTGCCACCAGGCTTCCGCCGCCAGATGGGAGAAGCTCATCACTGTCAACTT
 CTGGGGCAAGACTCCTACGTGGAACCTGGCTTCGCCAAGGTCGACCCAGGCAACCTCCCTGCAAGTGGC
 CAGTGAGACATAAGCCGATCTCTCTACAAGGAGACATGACCCCTGGCATGGAGCTGTACAGGGGCA
 CGTGCGGCTGGCTATGACAGCCTGAGTGTCCCTTCAACACAGTGTACAGTGTGGAGACAGTGAATGATGGGCA
 GTTTCACAGTGTGGAGCTGGTGTGACCTTAAACAGACCTTGAACCTAGTAGTGGACAAAGAACTCCAAGAGCCT
 GGGGAAGCTCCAGAAGCAGCCAGCAGTGGGCATCAACAGCCCCCTCTACCTTGGAGGCTATCCCACTTCCACGG
 CCTCTCTGCCCTTGCCCAAGGCAAGGACCGGCCCTTAGCGGCTTCCACGGATGCATCCATGAGGTGCGCATCAA
 CAACAGCTGACAGACTTCAAGGCCCTCCACACAGCTCCCTGGGGTGTACCGAGCTGCAAGTCTGTCAGCCT
 GTGCAAGCAGCGCTGTGCCCTCCGTGGAGAAGGACGCTGGTGTGCGAGTGGCCCGCAGGCTGGACGGGCC

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FIGURE 1798B

ACTCTGCGATCAGGAGGCCCGGGACCCCTGCCCTCGGCCACAGATGCCACCATGGAAAAATGTGTGGCAACTGGGAC
CTCATACATGTGCAAGTGTCCGAGGGCTATGGAGGGGACTTGTGTGACCAACAAGAATGACTCTGCCAATGCCTG
CTCAGCCTTCAAGTGTACCATGGGCAGTGCCACATCTCAGACCAAGGGGAGCCCTACTGCCTGTGCCAGCCCGG
CTTTAGCGCGAGCACTGCCAACAGAGAAATCCGTGCCCTGGGACAAGTAGTCCGAGAGGTGATCCGCCGCCAGAA
AGGTTATGCATCATGTGCCACAGCCTCCAAGGTGCCCATCATGGAATGTCGTGGGGGCTGTGGGCCCCAGTGCTG
CCAGCCCACCCGAGCAAGCGGCGGAAATACGTCTCCAGTGCACGGACGGCTCCTCGTTTGTAGAAGAGGTGGA
GAGACACTTAGAGTGC GGCTGCCTCGCGTGTTCCTAAGCCCCTGCCCGCCTGCCTGCCACCTCTCGGACTCCAGC
TTGATGGAGTTGGGACAGCCATGTGGGACCCCTGGTGATTGAGCATGAAGGAAATGAAGCTGGAGAGGAAGGTA
AAGAAGAAGAGAATATTAAGTATATTGTAAAAATAACAAAAAATAGAACTTATTTTTATTATGGAAA

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FIGURE 1799

GCCATGGGCGCGCCCGCCCTGTTGTTACCGGTATTGTAAGAACAAGCCGTACCCAAAGTCTCGCTTCTGCCGA
GGTGTCCCTGATGCCAAGATTGCAATTTTGACCTGGGCGGAAAAAGGCAAAAGTGGATGAGTTTCCACTTTGT
GGCCACATGGTGTGAGATGAATATGAGCAGCTGTCTCTGAAGCCCTGGAGGCTGCCGAATTGTGCCAATAAG
TACATGGTAAAAAGTTGIGGCAAGATGGCTTCCATATCCGGGTGCGGCTCCACTCCTTCCACGTCAATCCGCATC
AACAAGATGTTGTCTGTGCTGGGCTGACAGGCTCCAAACAGGCATGCGAGGTGCCTTTGGAAAGCCCCAGGCG
ACTTTGGCCAGGTTTCACTGGCCAAGTTATCATGTCCATCCGCACCAAGCTGCAGAACAAGGAGCATGTGATT
GAGGCCCTGGGCAGGCGCAAGTTCAAGTTTCTGGCCGCCAGAAGATCCACATCTCAAAGAAGTGGGCTTCACC
AAGTTCAATGCTGATGAATTTGAAGACATGGTGGCTGAAAAGCGGCTCATCCAGATGGCTGTGGGGTCAAGTAC
ATCCCCAATCGTGGCCCTCTGGACAAGTGGCGGCCCTGCACTCATGAGGGCTTCCAATGTGCTGCCCCCTCTT
AATACTCACCAATAAATTCTACTAATCTCCAAAAAATAAGAAAAAATAAGACCAA
AAAAAAAAAAAA

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FIGURE 1800

GGCACGAGGGGTGAGACGCTGATGGGAGGATGACGCTACTGGTGTCTGAGTGCTCCGCGCGGCTGCTGCAGCAGGA
AGAAGAGATTAAATCTCTGACTGCTGAAATTGACCGGTTGAAAACCTGTGGCTGTTTAGGAGCTTCTCCAAATTT
GGAGCAGTTTACAAGAGAAAATTTAAATTTAAAGTATCGACTGAATATTCTTCGAAAAGTCTTCAGGCAGAAAG
GAACAAACCAACTAAAAATATGATTAACTATTATAGCCGCTACAAGAGGCTCTTGGTCTATGCAATTAAAGGCTGC
ATATCCAGATTTGGAAAATCCTCCTCTGCTAGTGACACCAAGTCAGCAGGCCAAGTTTGGGGACTATCAGTGTAA
TAGTGCTATGGGTATTCTCAGATGCTCAAACCAAGGAACAGAAAGTTAAATCCAAGAGAAATGCTGAAAACAT
TACCAACACCTCCAGACAATGAATGTATTGAAAAGTTGAAATGCTGGTCTGGTTTTATTAAATGTCACCTT
AAGAAAGGATTTGTATCAGAACAATTGACCAGTCTTCTAGTGAATGGAGTTCAACTACCTGCTCTGGGAGAGAA
TAAAAGGTTATAGTTGACTTTTCCCTCCCTAATATAGCTAAAGAGATGCATGTAGGCCACCTGAGGTCACACTAT
CATAGGAGAGAGTATAAAGCCGCTCTTTGAATTTGCAGGGTATGACGTGCTCAGGTTAAATCATGTAGGAGACTG
GGGGACCCAGTTTGGCATGCTCATCGCTCACTGCAAGACAAATTTCCAGATTATCAACAGTTTCACCTCCTAT
TGGGATCTTCAGGCTCTTTATAAGGAATCTAAGAAGAGGTTTGATACTGAGGAGGAATTTAAGAAGCGAGCATA
TCAGTGTGTAGTTCTGCTCCAGGGTAAAAACCCAGATATTACAAAAGCTTGAAGCTTATCTGTGATGTCTCCCG
CCAAGAGTTAAATAAAATCTATGATGCATTGGACGCTCTCTTAAATAGAGAGAGGGGAATCCTTCTATCAAGATAG
GATGAATGATATTGTAAGGAATTTGAAGATAGAGGATTTGTGCAGGTGGATGATGGCAGAAAGATTGTATTGTT
CCCAGGGTGTCCATACCATTAAACCATAGTAAAAATCAGATGGAGGTTATACCTATGATACATCTGACCTGGCTGC
TATTAACAAAGACTATTGAGGAAAAAGCAGATATGATTATCTATGTTGGGACAAATGGACAATCTGTGCACCTT
CCAGACAATATTGCTGCTGCTCAATGATTGGTTGGTATGACCTAAAGTAACTCGAGTCTCCATGCTGGATT
TGGTGTGGTGCTAGGGGAAGACAGAAAAAGTTTAAACACGTTTCGGGTGAACAGTGCCTCATGGATCTTCT
GGGAGAAGGACTAAAACGATCCATGGACAAGTTGAAGGAAAAAGAAAGAGACAAGGCTTAACTCGACAGGAAT
GAATGCTGCTCAGACATCCGTTGCATATGGCTGCATCAATATGCTGACCTTTCCCATACCGGTTGAATGACTA
CATCTTCTCCTTTGACAAAATGCTAGATGACAGAGGAAATACAGCTGCTTACTTGTGTATGCCTTCACTAGAAT
CAGGCTCTATTGCACGCTGCGCCAATATTGATGAAGAAATGCTCCAAAAAGCTGCTCGAGAAACCAAGATTCTTTT
GGATCATGAGAAGGAATGGAACCTAGGCCGGTGCAATTTACGGTTCCCTGAGATTCTGCAAAAGATTTTAGATGA
CTTATTCTCCACACTCTCTGTGATTATATATATAGAGCTGGCAACTGCTTTACAGAGTCTTATGATAGCTGCTA
CTGTGTGGAGAAAGATAGACAGACTGGAAAAATATTGAAGGTGAACATGTGGCGTATGCTGCTATGTGAAGCAGT
AGCTGCTGTCATGGCCAAAGGGGTTTGATATCTGGGAATAAAACCTGTCCAAAGGATGTAATCCCTTATAGGTTT
GAACTGCTGTGTTTTTACCAAGTGCCATTGGCAGCTGTTTGTCTTTTACAATCATGTGGACACAAGCATAAG
TAAAGAAAATTTGTCAACCAAAAAA

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FIGURE 1801

MDVLVSECSARLLQEEEEKSLTAEIDRLKNCGCLGASPNLEQLQEENLKLKYRLNLRKSLQAERNKPTKNMIN
IISRLQEVFGHAIKAAYPDLENPFLVTPSQQAKFGDYQCNSAMGISQMLKTEQKVNPREIAENITKHLDPNEC
IEKVEIAGPGFINVHLRKDFVSEQLTSLLVNGVQLPALGENKKVIVDFSSPNIAKEMHVGHLRSTIIGESISRLF
EFAGYDVLRLNHVGDWGTQFGMLIAHLQDKFPDYLTVSPPIGDLQVFYKESKKRFDTEEEFKKRAYQCVVLQGK
NPDITKAWKLICDVSRLQELNKIYDALDVSLIERGESFYQDRMNDIVKEFEDRGFVQVDDGRKIVFVPGCSIPTLI
VKSDGGYTYDSDLAAIKQLFEEKADMIYVVDNGQSVHFQIFAAAQMIGWYDPKVTRVFHAGFGVVLGEDKK
KFKTRSETVRLMDLLGEGKRSMDKLEKERDKVLTAEELNAAQTSVAYGCIKYADLSHNRLNDYIFSFDKMLD
DRGNTAAYLLYAFTRIRSIARLANIDEEMLQKAARETKILLDHEKEWKLGRCILRFPEILQKILDDLFHLTLCDY
IYELATAFTEFYDSCYCVEKDRQTIGKILKVNMMWRMLLCEAFAVMAKGFIDILGKIPVQRM

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FIGURE 1802

CAGTTTCACAGTGTTCATCAGGCGAGATACTTTTGGACCCACAAAGCCAGTTTTTTGGGGGGATGCTCAGTGTCTA
CCTGCAGTGCCAAAGTTTTCCTTTGAACAGCCCTCTCTGCGCGCGCTCCAGCTCCACCCCTATCAGCTGGGTG
CTGGCTGCTTCTGCGTGAGGAGCTTCTCTGATCAGCTGTAGCATCTTTAGTGCTTCTGCTCCAGTCTGGCCCTGCAA
ATCCCATTTTCCAGAGAGGCTTGGGCGAGGGCCCACTTGCCACTTGGCCCTGTGCCAGAGCGTTGGGGGAGATG
GCAGCCAGGGGAAGAGGGAGGTGGGGGAAGGGCCGCCACCGCTTGAGGGTCCCCCTCCCTTGAGAGGAGGCCCAT
GGCAGTTTTCCTGAGTTCTTGATCCACTTTTGTTTAAACAATTTTGTGAAGCTATGTGAGATTTGACTGCATTT
CAAAAGACAAAACACATGTTTTTCTGATTGCTCTTTGCTTTTGCCTTTTGCAGCAGCGTTTTCAGATACTTTGTGAGTGT
CTACTCTGTGCTAGGTGCTGAGTAGACTGGGATGTGTGTGGCTCCATCCCTGGCTGGAAGAGCTTTGAGTCCCTGT
CTGCTGACTTCACTGAAGGAGTTTCTCTCTTGCTTCATTCTCTCTCCCGGGGTGAGCTGGGTAGGAGCAGACT
TGCCCTGCTTCTCTAGGCGAAAGTTTTCCTGCAAAATGAAAGAACTCTGCCATTCTCTTTTGTCTATGATGATGA
TGATTATTTGACATGACCCGCGGGTACTGAAGCCACAGTCTCTCTGTTCACTGTTCTCTCTTGGATCATATC
TATGGCTGAGGACGCTGTGATCCAGTCCCTTTCCCTACAATGGTAGACACTTCCCGAGGACAGTGGGTGGGTGAG
GGTGCCGAGTCACTCTCTAGCTGTCTTGCCTGGGGACTTAGATTTACCCCATCCAGGACTGTGGTGCCTATTCT
TGTGAGCGATTGATGGCGCATATGCAGAACTCCCTGGAGTCATGGCTCTAGAAAGTGTCCAGGCCCATCGTGAC
AATGGTGCCAAAGCACCGGCTGTGTGACAGTGCCTAAACACACAGCTCCTTTAATCCTTACGGGCAAGCCTGTGA
GGCGGATAGGACCGCCCTGATCTATAGTGAAGAAATTAAGGTTTACAGGGGAGAAAGGTCCAAATATGTGGCCAAAG
TGGGACTGAGATCTCGAGTTTGGGTTTGTGTGGTTTGTGTGTTGTTCTTCCCTCGTGTCCATGACTTTTCT
CTGCCATTAGCAGGGAAGTGTGCGGAGGGCTTCCAGGGAATCAAGTGACCCCTCCCTCTGAATTTCCGTTGCCCTT
TGCCCGGCCCTTGTCTCACACTTTTCAGTAGGTCACAGGCCAAATGGCAGGCCAAAAGGTGGGCGAGAGTTTTTT
TTTCTTCCCTCACCCCTGCTTATTAACACAATTTGTGACAACTACTTTACCTTACATCCCGAGGCAACGGACAG
CTTGCGGTACCTCCAAAATTTGGAAAACCCCTGAGTCTAAGACCACTCTTGATAAAAAGGGCCTTGTCTACAT
GTTCTGCTCGGAATCTTCTTTGCCATTGGTGGGTGTATGTCGTCACAGCTGAGACTGCGGAGAGCTGAGCTCC
AGCTTAAACCGCTTTTAAATGGCCCTTCCCTACTGGGGGATCGCTGGAGCCCATGCCAGGTTACGGTGTGCTATT
AAACCTCTGCCACAAGGCCACGCCATAGAATCAATTTCCAAGTCAATGTTCTTGGCCCTAAAATGTTTGGCCCA
CTGAGGATTTCAATCCAGGTGGAAGATGGGGGAAACATATGCCAGTTAAAGAGCAAGTGCTGAGTGTGCCAGGA
CTTGAGAAAGGACCTTAGGCTGAGGAGTGGACAGTCTGGTATTATTTCCGCTCTCCCAAGTACCCAGCAGAGAT
GGGAAAAGAGAAACTGCTCTGCCCTCCAGTAGCTGGCAACTTGACATCAAGAAACAAACATTTCGTAGCTGG
ACCCCGTCTCTTCACTGTCGCCAAGTCTTACATGTTGGCTTAAGCTGCGCCCTTGAGGCGGTACCTTTCTCTT
TGGACTGTGACAGTGGACATTAACAGCTGAGCCATGTGTGGCTGTTATCCCCCAAGGGTTTCCAGGGCCG
TTCTGCGAGGCTGTTGTGTAGACTGCAGACATCCATACCTCACCACAGACCAAGATGACCTCTGTGTGAGACTGT
GCGCTGATGAGAGGTAGAGCAGCATGCATCAGGCTGAGGGTGCAGGCGCCCTCTCTTGGCTGTGAGGAATTG
CTCCTAATAGTGAAGTTTCCACAGGGTCCACAGGAGCTGCAGAGCTGGAACCGGAGGCTCCACAGTCTCTT
GCTGTCTATGAGACTCTCTCAGAGCACCTTTCTACAGACTGGAATGCCAGCTCCGTGGGGTGGCATCTGGTT
CTGGTGTATTCTGCCAAGTTTCTGAGCTCCTCCTCATCTTTCAACATTTCACTCTTCTTCACTCCCTGATCTCCCT
CCAAAGTAAGCCTTCTTAGCTCCAATCAGGATGAGGGGCTCAACCTCTTCTGTCTTCAAGAGGCCAAACGAG
TGCCACAGTCGGTAGCCCTTCACTTTTATGATGCTCTATTCAATGATAAAAAGAGGTGCCCCACAGGCTTACATC
AGCAATAAGCAATTTCTAATGCAACGATGGTGCACATTTTACCCAGTGTGTGGCCATGTATGCTTTTGTGCC
GTGTAATTTATTTAGCGCCCTTCACTTAGAGGGGTGATGATAAATGTGGCCACCTTGATTACAACCCCAT
CTCGTGTCTGCTCATAGGATGACGCTGGAGATCCCCACACTTACTCTACCTCTTGGCAAATTTGGCATTCGCGTG
GTGGTTTTTGTCTTCTTAAACATTAATAAATGAGTATATAGGATGTGAGGGGAGGGGTGAGAAACACTAGCT
GTAGCATGTGTAGGGTATATACCTTTACACTTTGACTTCTTCCCTTTTTTTTTTAAATAAAAAAGTCTTGA
CTGTTTCAAGCTTCATCATG

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FIGURE 1803

GGGGCCTGGTGTGATTCCGTCTCGCGGTTGTTCTCTGGAGCAGCGTTCTTTTATCTCCGTCCGCCCTCTCTCC
TACCTAAGTGCCTGCCGCCACCCGATCGAAGATTGCATGGACATGGACATGAGCCCCCTGAGGCCCCAGAACTAT
CTTTTCGGTTGTGAAGTAAAGGCCGACAAAGATTATCACTTTAAGGTGGATAATGATGAAAATGAGCACCCAGTTA
TCTTTAAGAACGGTCAGTTTAGGGGCTGGTGCAAGGATGAGTTGCACATTGTTGAAGCAGAGGCAATGAATTAC
GAAGGCAGTCCAATTAAAGTAACACTGGCAACTTTGAAAATGCTGTACAGCCAAAGGTTTCCCTTGGGGGCTTT
GAAAATAACACCACCACTGGTCTTAAAGTTGAAGTGTGGTTTCAGGGCCAGTGCAATATTAGTGGACAGCACTTAGTA
GCTGTGGAGGAAGATGCAGAGTCAGAAGATGAAGAGGAGGAGGATGTGAACTCTTAAGTATATCTGGAAGCGG
TCTGCCCTGGAGGTGGTAGCAAGGTTCCACAGAAAAAGTAAACTTGTCTGTATGAAGATGATGACGATGAT
GATGAAGAGGATGATGATGAAGATGATGATGATGATGATTTTGATGATGAGGAAGCTGAAGAAAAAGCGCCAGTG
AAGAAATCTATACGAGATACTCCAGCCAAAAATGCACAAAAGTCAAAATCAGAAATGAAAAAGACTCAAAACCATCA
TCAACACCAAGATCAAAAGGACAGAATCCTTCAAGAAACAGGAAAAAACTCTTAAACACCAAAAGGACCTAGT
TCTGTAGAAGACATTAAAGCAAAAATGCAAGCAAGTATAGAAAAAGGTGGTTCTCTTCCCAAAGTGGAAGCCAAA
TTCATCAATTATGTGAAGAATTGCTTCCGGATGACTGACCAAGAGGCTATTCAAGATCTCTGGCAGTGGAGGAAG
TCTCTTTAAAGAAAATAGTTTAAACAATTTGTTAAAAAATTTCCGTCCTATTTCATTTCTGTAAACAGTTGATATC
TGGCTGTCCTTTTTATAATGCAGAGTGAGAACTTCCCTACCGTGTTTGATAAATGTTGTCCAGGTTCTATTGCC
AAGAATGTGTTGCCAAAATGCCTGTTTAGTTTTTAAAGATGGAACCTCCACCCCTTGTGGTTTTAAGTATGTA
TGGAAATGTTATGATAGGACATAGTAGTAGCGGTGGTCAGACATGGAATGGTGGGGAGACAAAAATACACATGTS
AAATAAAACTCAGTATTTTAATAAGTAAAAAAAAAAAAAAAAACCAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1804

MEDSMDMDMSPLRPQNYLFGCELKADKDYHFKVDNDENEHQLSLRTVSLGAGAKDELHIVEAEAMNYEGSPIKVT
LATLKMSVQPTIVSLGGFEITPPVVLRLKCGSGPVHISGQHLVAVEEDAEEDEEEDVKLLSISGKRSAPGGGSK
VPQKKVKLADEDDDDDEDDDDDDDDFDDEEAEEKAPVKKSIRDTPAKNAQKSNQNGKDSKPSSTPRSKGQ
ESFKKQEKTPKTPKGPSSVEDIKAKMQASIEKGGSLPKVEAKFINYVKNCFRMTDQEAIQDLWQWRKSL

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FIGURE 1805

GGGCGGCGCCCAATGGGCTGCGCGGAGCGTCACTTCCCGGCAGCGGGAGGCGAGTGGCGAGTGGCGAGTGGCGAG
TGT CAGGGGGGCGGCCGCGGGGGCGGGCGGCCGGAGGAGCGTTGGCAGCGGGCTCGGACCCACGCGCGCCG
CGGCCCGCCTGGCCTGCGAGCGCTCCACCCCCGCGGGCGGCACGATGCCCTTTGACTTCAGGAGGTTTGACATCT
ACAGGAAGGTGCCCAAGGACCTTACGCGAGCCAACGTACACCGGGGCCATTATCTCCATCTGCTGCTGCGCTCTTCA
TCTCTTCTCTTCTCTCGGAGCTCACCGGATTATTAACGACAGAAAGTTGTGAACGAGCTCTATGTGATGAC
CAGACAAGGACAGCGGTGGCAAGATCGACGTCAGTCTGAACATCAGTTTACCCAATCTGCACTGCGAGTTGGTTG
GGCTTGACATTACGAGTGAATGGGCGAGCAGCAAGTGGGCCACATCGACAACCTCCATGAAGATCCCGCTGAACA
ATGGGGCAGGCTGCGCGCTTCGAGGGGCGAGTTCAGCATCAACAAGTCCCCGGCAACTTCCACGTGTCCACACACA
GTGCCACAGCCCAGCCACAGAACCCAGACATGACGATGTATCCACAAGCTCTCCTTTGGGGACACGCTACAGG
TCCAGAACATCCACGGAGCTTTCAATGCTCTCGGGGAGCAGACAGACTCACCTCCAACCCCTGGCCTCCACG
ACTACATCTGAAGATTGTGCCACGGTTTATGAGGACAAGAGTGGCAAGCAGCGGTACTCTTACCAGTACACGG
TGGCCAACAAGGAATACGTGCGCTACAGCCACACGGGCGCATCATCCTGCAATCTGGTTCCGCTACGACCTCA
GCCCCATCAGCGTCAAGTACACAGAGAGCGGCAGCCGCTGTACAGATTATCACCAGATCTGTGCCATCATTG
GCGGGACCTTCAACGTCGCCGGCATCTTGGACTCATGCTCTTACAGCGCTCTGAGGCTGGAAAGATCCAGC
TGGGCAAGATGCAATGACGCGCACACCCAGCCTAATGGCCGAGGACCCTGGGCATCGCCAGCCTTGCTCCAGTG
CCTGTCTCCTTTGGCCCTCAATCTGGTCCCAAACTGGCTGTGTCCAAAGGGTGTGTGGGAAGTGGGGGAAAG
TAGAGGATGGCTCGATGTTTTGCAGTACCTCTTTTCCCGTGTTCTTTTATAGCAAATTACACTGCTGAAGT
TGCACTTCCCTTTTCCCTGGGGAGCCCCAAGAACAGAGTCAGGCAAGGGGTGGGGAGTCCAGGGGAACATCCAG
AATGCATATCGATCAGCTCTCAGCCAGGCTTCGACAACTCTCGAGCCCCACTAGGTGGACACATTAATGATTG
GTTTCTCCCTGGGCAGCAACCTGCCCCAGAGGCCACGAGCTGGGCTTTCAGCTTTGGGACCAGGCTGCCCAA
AGGTACTCCTTTATACACCCGGCACCTTCCACGAAAGATGGTACTTCCAAGCAAGCCCTATGATTGTGACTA
TAGATGGAAATGTGTGGCATGCACATGAGTTGAAATTTCTTTATGCAATTTTTTGAAGAAAAAACAAC
TCTGAGGACATAGGGGATGTGAGTTTCCATATGGAAGAGACACCTCTGACCCGTATTCTTATAATCAAAATCTGA
AGGGAATAAATGTTTGTCTTTCCCACTCGTTGGGTTCAACTAGATTAAAGGCTGATTTTCAG

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FIGURE 1806

MPFDFFRFDIYRKVPKDLTQPTYTGAIISICCCFLFLFLSELTGFIITTEVVNELYVDDPKDSDGGKIDVSLNI
SLPNLHCELVGLDIQDEMGRHEVGHIDNSMKIPLNNGAGCRFEGQFSINKVPGNFHVSTHSATAQPQNFDMTHVI
HKLSFGDTLQVQNIHGAFNALGGADRLTSNPLASHDYILKIVPTVYEDKSGKQRYSYQYTVANKEYVAYSHTGRI
IPAIWFRYDLSPITVKYTERRQPLYRFITTICAIIGGTFTVAGILDSCIFTASEAWKKIQLGKMH

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FIGURE 1807

ATGGCGTATCACGGCCTCACTGTGCCTCTCATTGTGATGAGCGTGTTCCTGGGGCTTCGTCGGCTTCTTGGTGCCT
TGGTTCAATCCCTAAGGGTCCTAACCGGGGAGTTATCATTACCATGTTGGTGACCTGTTTCAGTTTGCTGCTATCTC
TTAGCTAGTTTGAGCACAGGACATAATCACTTCCCAGGGGCTGGGTGCACCGCTTTGGTTTCCAACCAAACCAT
GACTCCATGAGCGTGAACCAGGACTATTCTGCTCACCTTGTGTCTGCACACAGTAGGTGCTTAACAAACACCTGG
GGTATCTTCAAGTCCATTCCCTCATCTGACCTCACAGCAGCCCTCTGAGGAAGGCAGCCTGCACACTGGAGGAG
ACAGGTCGCACTCAGCCATTCTGAAGACGGTAAAAGTGAGAGCCCTGGATGCCATGGGGGCAAGGACCATATCT
GTTCTGCTTTTTTCTGAAGTCCCTGACCCAATTTGTGCCCGGTACATTGAAGAAGCTCAGGACATGGCTATTATT
TCAATCAAGCTGAAATCTACTGAGCTGAGCTGGCCCAACAGGAATTCAGATAAGACAGTAG

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FIGURE 1808A

GAAGCCGCCCATCCCGCCCCAAGTGGAGGAAGAGTATTACACCATCGCCGAATTCAGACAAACCATCCGACAGCGG
CATCAGCTTCAGGCGCAGGCCTGAAGGTCGAGGTGATCGAGAAAACTTGATGGCTGGTGGTACATTAGATTGA
AGATAAGGAAGGCTGGGCCCGCCGACCTTCATTGACAAGTACAAGAGACGAGCAACCGCTCGAGACCCAACTT
TC TGCTCCCTGCCCCACGAGGTGACCCAGCTCCGGCTGGGGGAAGCAGCAGCGCTGGAGAACAAACCGGCAG
CGAAGCCACGGGGCCCCCTCCCGCCCCCTGCCTGACGACACCGCATGGTGTCACTGAGCTCGGGGTGGCCATGGTCTAA
AGACTGGAAGGGGACTAAGGATGTCTCGAGGAAGGCATCTTCAGACATGTCTGCGTCAGCAGGCTACGAGGAGAT
CTCAGACCCCGACATGGAGGAGAAGCCAGCCTCCCTCCGCGGAAAGAAATCCATCATCAAGTCGAGGGGGAGCT
GCTGGAGCGGGAGCGGGAGCGGACGAGGAGGACGACTCCGGGGCCCCACTCCCAAGCTCCGGGCTGATTTT
GCCGATGATGCCAGCCAAACACATCCCTCCAGCCCCGGGACAGCAGGAGGCCAGAGCCCAAACCTGACAAAAGCAG
ACTGTTCCAGCTGAAAAATGACATGGGGCTGGAGTGTGGCCACAAGGTCTTGCCCAAGGAAGTGAAGAAGCCCAA
CCTCCGGCCCATCTCCAATCCAAACTGACCTGCCAGAGGAGAAGCCAGATGCCACTCCCCAGAATCCCTTCTT
GAAGTCCAGACCTCAGGTTAGGCGAAAACAGCTCCTTCCCCCAAACGGAGCCACCTCAGGGCGAAGACCAAGT
CGACATCTGCAACCTCAGGAGTAAGCTCAGGCCTGCCAAGTCCCAAGACAAGTCTTGTGGATGGGAGGGGCC
CCAGGCATATGGGGGCCAAGACGTGGCCTTCAGCCGAAGTTCCTCCAGGAGAGGGGCCCTGGCCGCGCCAGGA
CAGGACGGGCAAAACAGGATGGTCTGACGCCAAAAGAGATTCTCTGACAGGCCCTCCGAGGGCCAGCAACAC
AGATCCTGTGTCTAAGAGCGGTGCGCTGTCTCTCCAGAGGCTCCCCAGCAGACGACTGTGGTCCCAACCGCAG
ACCACCTCCCCCAAAGAAACCTCTTCGTCTACAGGCCGCTCCCAAGGTCAGAGGTCCACAGTGTGAAGGCCA
CGAAAGCAGGGCGAGCTCCCAACCCAGGCGCGTGTCTCTCTGCTCCCTCCAAAAGCCAAACCTTTCTCTCAACCT
TTTGGGGCGCAGGATGACACGCGAGGCAAAAGCAGCCTGGGGCCATGGGGGACCGGCAAGATTGGAGAAAACAG
GGAGAAAGCAGCTGACAGCTCTGTGCCCAATGCCACGGCCTGAAGGACTCTTTGTATGTGGCGCTGGCCGACTT
TGAAGGACACAAGACACACAGCAGCTTCAGGAAAGGACAGTGTGAAGTCCGGGGAAGAACAAGCATGGTGCT
GTGGTTCTGCCAGTCTGAGCGGAGCCCTTCTCTGGGAAGGTGGATTCTTCCAACATATCTCAGAAAGAAGCC
GTAGCCGACTCCCTTTCTGCCTAAGAGGGCCGCTGGTCTTGTGCTTTACCCACAGTATTTAATACGCCCTCTTA
ATTTATCATTCTCCACGACGCTTCAAGGCAGACAGACTCTGGGGTACTGTGACTCTTGTCTCCCATGGCTGGA
GAGTGAGTTCTGGACACCTCGGGCGCCCTGGGCTGATCCCTCCTATCACAGCATCATCGGAGGCTCAGAACCC
ACAGCCTTTGGCTTTCTGCTCATGTGACATCCCTGCCTTAAGAGAACTCCTCTGGCCAATGGCATGGCCACCA
CGAGTGGGACCAAGACTCTCCAAGCCTCCAGGACTGGATCCCATGGCTGGGAGAACTCCAGCAAGGGTCTCTC
ATGGCTTGGACATGGCACAGTAAGGGGCGACCAACCCAGTCCATGATGACTTTGCTCCAACCTTCTTCATGTTTC
TAAAGGCCCATGGCTTTATTCACTCTCTCTAAATTGCTGTGCTACCAAGAGGAATCTCATCTGGAAGAAATGCAT
TCCATTACAGTTCTCAGGGAAGTGTCCCTTCCCCAAGCCTCAGGCCCGTGGGCTCTGAGGTTCCACTGGAT
GGGGCTCCCCAGAGTGGGCTGGAGATCCGCTCAGCCGCCCTGCCTCCCACTTCTATCTTGGGACCGTGGTC
AGCCCTGAAGGTTGGTTTCAAGCCCGCGTATGCTGCTGTGCTGCTGCGGCTCGGCTCCCTCCAGGCTTTTC
AATGAGAGTTCCCAACCACTTGAGCATTTCATTTTGCCTACCTAAAGCAAGAATCTCAAAGTTTGTGTGAA
TAAGAGGCCCATTCACAGTCTGCGCTTGTGAGCACCCCTTTGCTGAGTGGCTCGTGGGTGCCAAGCCTGTACT
TTGGCGCTTTGCTATTCATGCTTTGACCTCACAACCTCCCTTTATAGATGAGGAAATTCAGCTCCATGTGCCCA
AGGACACACCAGCCAGGAGGAAGAGGGAAGAGGATTTGAGTCCAGGCCCTGCGTGACTTCAGTGGCTGTGCCCTCC
CTCTGTAAAAGACAAACAGGCAGGGAAGAGATAGAAGCTGGCTAAGTGGCCCAAGTGGCTTCATTGTGAGG
GGGCTGAGGGGCACTCGTGGCTGCTCCCAACCCACCATCCCTCCAGCCCAAGCAGGCTATACCAAGGCTGC
CTTGGACTCAACAGCTGCTATCTTCATGACAGGAGAAATGACAGGCTTGTGGTGTGACACAGGCGCTGTCTCT
CTTCTAAGCTGTTGCCCTTGGGGAATAGAGCTTATGAGCAACGGGAGCTGAGGTGGCCTCGAGGGCCAGCCTG
GAGGGCTCTGAGCATAGCATGAGCGGTCCTATAGGAGGCGAGGTAACCAAGGGCCAGGCGAGCTGCTTCTGT
GCCCTCTCGCGATTGTGAATGTTTTTCTTTTTCACGCACTGCCAAATCTGTTTTCTCCCTTGAAGAAACCA
GGGAGATGTGGTCTCTGTCAAATGAGGTCTGGAGAGGCACTGACTAAATCACTCGAGAGCAAAATCAGGACC
CAGCATTTTCACTCCCGCCAGCAGTAAGAGAGCAGGACGAGCAAGCCCTTCCATTTCAACCGACCGAGGCGCC
CTGCCCTGCCCTGCCCGGCCCTCCCCACCTGCCCTGCCCGCAGAGATCTCCAGTTCACAGTGTTCATCAGGGA
GATACTTTTGGACCCCAAGACCGAGTTTTTGGGGGATGCTCAGTGTCTACCTGCAGTGCCAAAGTTTTGCTGT
AACAGCCCTCTTCTGCCGCGCTCCAGCTCCACCCCTATCAGCTGGGTGCTGCTGCTGCTGCTGAGAGCT
TCCTCTGATCACCTGTAGCATCTTTAGTGCTTCTGCTCAGTGGCTGCAAAATCCCAATTTCCAGAGAGGCTTGG

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FIGURE 1808B

GCAGGGCCCACTTGCCACTTGGCCCTGTGCCAGAGCGTTGGGGGCAGATGGCAGCCAGGGGAAGAAGGGAGGTG
GGGAAGGGCCGCCACCGCTTGAGGGTCCCCTCCCTTGAGAGGAGGGCCCATGGCAGTTTTCCTGAGTCTTGTATC
CACTTTGGTTTAAACAACCTTTTGGAAGCTATGTGAGATTGACTGCATTTCAAAGACAAAACACATGTTT
TCTGATTGTGCTTTGCCTTTCAGCGACGCTTTCAGATACTTTGTGAGTGTCTACTCTGTGCTAGGTGCTGAGTA
GACTGGGATGTGTGTGGCTCACTCCCTGGCTGGAAGAGCTTTGAGTCTGTCTGCTGACTTCACTGAAGGAGTTT
CTCTCTTGCTTCACTCCTCCTCCCGGGGGTCAGCTGGGTAGGAGCAGACTTGCCTGCCTTCTCTAGGCAGAA
AGTTTTCTCGCAAAATGAAAGAAATCTGCCATTCTCTTTGCTATGATGATGATTATTCTGACATGACCCGGC
GTACTGAAGCCACAGTCCCTCTCTGTTCACTGTTCTCCTTGAGTCAATCTATGGCTGAGGACGTCTGTATCC
AGCTCCTTTTCCACAATGGTAGACACTTCCCAGGCAGTGGGTGGGTGAGGTGGCCAGTCACTCTCTAGCTG
TCCTTGCTGGGGACTTAGATTACCCCATCCAGGACTGTGGTCGCTATTCTGTGAGCGATTGATGGCGCATATG
CAGAACTCCCCTGGAGTCACTGCTCTAGAAAAGTGTCAGGCCCATCGTGACAATGGTGCCAAGCACCGGCTGGT
GACCACTGCTTAAACACACAGCTCCTTTAACTCCTTACGGCAAGCCTGTGAGGGCGATAGGACCAGCCCTGATCT
ATAGTGAGAAAAATTAAAGTTTCAAGGGGAGAAGGTCCAAATAGTGCCAAAGCTGGGACTGAGATCTCGAGTTTGGG
TTTGTGTTGGTTTTGTTGTGTTGTTCTTTCCCTCGGTCCATGACTTTTCTCTGCCATTAGCAGGGAAGTGTGCG
GAGGGCTTCCAGGGAATCAAGTGACCTCCCTCTGAATTCGGTGCCCTTTCCTCCCGCCCTTGTCTACACATT
TCAGTAGGTCACAGGCCAAATGGCAGCCCAAAGGTGGGCAGAGATTTTTTTTCTCCCTCACCCCTGCTTTAT
TAAACAATTTGACAACACTACTTTACCTTACATCCCAGGGCAACGGACAGCTTGCAGTACCTCCAAAAATTGG
AAAACCTGAGCTTAAGACCACCTCTTGATAAAAGAGGCCCTTTGCTCACATGTTCTGCTCGGAATCTTTCTTTC
CATTTGGTGGGTGTATGTCTGCCAGCTGAGACTGCGGGAGAGCTGAGCTCCAGCTTAAACCGCTTTTAAATGGCCC
TTCCCTACTGGGGGATCGCTGGAGCCCATGCCAGGTTACGGTAGTCATTTAAACCTCTGCCAAGGCCACGCC
ATAGAATCAATTTCCAAGTCAATGTTCTTGCCCTAAAAATGTTGCGCCCACTGAGGATTTCAATACCAAGGTGGA
AGATGGGGAAACATATGCCAGTTAAAGAGCAAGTGCTGAGTGTGCCAGGACTTGAGAAGGACCTTAGGCTGAGG
AGTGAGCAGTCTGGTATTATTTCGCTCTCCCAAGTACCCAGCAGAGAGTGGGAAAAAGAAAGAACTGCTCCTG
CCTTCCAGTAGCTGGCAACTTGACATCAAGAACAAAAACATTCGTAGCTGGACCCCGCTCTTTCATCGTGCCCA
AGTCTTACATGTTGGCTTAAGCTGCCCCCTTGAGGGCCGTACCTTTCTCTTGGACTGTGACAGTGGACACCTAA
CAGCCTGAGCCATGTGTGGCTGTCTATCCCCCAAGGGTGTGCCAGGCCGTTCTGCGAGGGCTGTTGTGTAGACT
GCAGACATCCATACCTACCCACAGACCAAGATGACCTCGTGTGACAGCTGTGGGCTGATGAGAGGTAGAGCAGCA
TGCTGAGGCCTGAGGGTGCAGGGCGCCCTCTTGGCTGGAGGAATGCTCCTAAGTAGAGTAAATTTCCAC
GAGGGTCCCAGGCAGAGCTGCAGAGCTGGAACCGGAGGCTCCACAGTCCCTGCTCATGGACCTCCTTCAGA
GCACCTTTCTACAGACTGGACTGCCAGCTCCGTGGGGTGGCATTGGTTTCTGGTGTATTCTGCCAAGTTATC
GAGCTCTCCTCATGTTTCAACATTCCATCTTCCCGTTTCTATCTCGACTCCAAAGTAGAGCCTTCTTAGCTCCA
ATCAGGATGAGGGGCTCAACCTCTTCTGTCTCTCAAAGAGGCCAAACGCACTGCGGTGAGGCTTCACTT
TTAGATGTCTTATTCAATGTAAGAAAGAGGTGCCCCACCAGGCTTACATCAGCAATAAAGCAATTTCAATGCAAC
GATGGTGTCCACATTTTACCCAGTGTGTGCCATGTATGCTTTGTGCGGTGTAATTTATGTTAGCGCCCTT
TCACTTAGAGGGGTGATGATAAACTGTGGCCACCTTGATTACAACCCACATTTTCTGCTTTGGGGAGCTTCCAAG
TAACAGGCCATTCTTACCTCCTCCAGAACAGTGGGCACTGCCACACCTCGTGTCTGCTATAGGATGAGC
CTGGAGATCCCCACACTTACTCTACCCCTTGGCAAAATGGCATTCCGGTGGTGGTTTTGTTTCTCTTAAACA
TTAAATAAATGAGTATATAGGATGTGAGGGGAGGGGTGAGAACAACTAGCTAGTCATGTGAGGCTATATACTT
TACCATTGACTTCTTTCTTTTTTTTTTTTAAATAAAAAAAGTGCTTGACTGGTTTCAAGCTTCATCATG

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FIGURE 1809

MDSGLPWSKDWKSGKDVLRKASSDMSASAGYEEISDPDMEEKPSLPFRKESIIKSEGELLERERERQRTEQLRGP
TPKPPGVILPMMPAKHIIPARDSRRPEPKPKDLSRLFQLKNDMGLECGHKVLAKEVKKPNLRPISKSKTDLPEEKP
DATPQNPFLLKSRPQVRPKPAPSPKTEPPQGEDQVDICNLSKLRPAKSQDKSLLDGEGPQAVGGQDVAFSRSLP
GEGPGRAQDRIGKQDGLSPKEISCRAPPRPAKTIDFVSKSVPLQEAQQRPVVPVRRPPPPKTTSSSSRPLPE
VRGPQCEGHESRAAFTPGRALLVPPKAKPFLSNSLGGQDDTRGKGS LGPWTGKIGENREKAAAASVPNADGLKD
SLYVAVADFEGDKDTSFQEGTVFEVREKNSSGWFCQVLSGAPSWEGWIPSNYLRRKKP

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FIGURE 1810

TTGGCTGATTGCAATTCTGGCCCAACTCAACCCCTCTCTTTGGACCGCAATGAAAAATGAAACCATCTGGTATCT
GAAGTATCATTTGGCCTTGAGGAAGAAGACATGCTCTACAGTGCTCAGTCTTTGAGGTCACGAGAAGAGAATGCCT
TCTAGATGCAAAATCACCTCCAACCCAGACCACTTTTCTTGACTTGCCTGTTTTGGCCATTAGCTGCCTTAAACG
TTAACAGCACATTTGAATGCCTTATTCTACAATGCAGCGTGTTCCTTTGCCTTTTTTGCACTTTGGTGAATTA
CGTGCCTCCATAACCTGAACTGTGCCGACTCCACAAAACGATTATGTACTCTTCTGAGATAGAAGATGCTGTTCT
TCTGAGAGATACGTTACTCTCTCTTGGAACTCTGTGGATTGAAGATGGCTCCTGCCTTCTCACGTGGGAATCAG
TGAAGTGTTTAGAACTGCTGCAAGACAAACAAGACTCCAGTGGGGTGGTCAGTAGGAGAGCACGTTTCAGAGGGA
AGAGCCATCTCAACAGAATCGACCAAACTATACTTTCAGGATGAATTTCTTCTTCTGCCATCTTTTGAATAA
ATATTTTCTCCTTTCTATGGA

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FIGURE 1811

GTCCCCAACATGGCGGCTCCCCAAGACGTCCACGTCCGGATCTGTAACCAAGAGATTGTCAAATTTGACCTGGAG
GTGAAGGCGCTTATTCAAGGATATCCGTGATTGTTCAAGACCCCTTAAGTGCTCTTACTGAACTGAACTACTAAAGTA
AAAGAGAAATTTCAACAGTTGCGTCACAGAATACAGCCAGTTCTCTATCAAAGGGCATTATTGGACTGCTTCC
ACATTTTTTTTTAAGCTAACTTATTCCTGACAGACTTTTCTTCAACTCAGCATGACTTCAACTCTCCAACAC
CCTGTTACCTTCAGTGACTGGAGCAGTTGGCTAAAGAGCAAGACAAGAATCAGAGAAACAACTTCTACTCCAG
GAAGTGGAGAAATCACAAAAGCAGATGCTCAGCAATCAGGCCTCATGGAGGAAAGCTAATCTCACCTGCAAAAT
GCAATCGCAATCTAGAGAAAGCAGAACTTCTTCAGGGAGGAGATCTCTTAAGGCAAAGGAAAACCAAAAGAG
AGCCTGGCCCAGACATCCAGTACCATCACTGAGAGCCTCATGGGGATCAGCAGGATGATGGCCCAGCAGGTCCAG
CAGAGCGAGGAGGCCATGCAGTCTCTAGTCACTTCTTACGAACGATCCTGGATGCAAAATGAAGAATTTAAGTCC
ATGTCGGGCACCATCCAGCTGGGCGGAAGCTTATCACAAAATACAATCGCCGGGAGCTGACGGACAAGCTTCTC
ATCTTCCTTGCGCTAGCCCTGTTTCTTGCTACGGTCTCTATATTGGGAAAAAGCGGCTCTTTCCATTTTGTGA
GATCCCAAAGGTGCCAGTTCTGGCCCTTTAGCTCCTGTTTCAGGATCTGTCTGGTTCTTGAGCTCTAGGCTGC
TAAGCTGAGCCACACACCCCTCCGTTTGACCAAGTTGCCTGCAGGTTGGATGGAACACAGTGCCCCACTTTTCTG
CAAGTAGCTGGCTTGTAAGGGTGAAACAGAGCCATGGGAGGAAGTCTGGCATTGGGATGCCGCCCTGGGGACAT
ACGAACCGCTCCTTCCACCATTTGTGCACTATGGGAGGCCGCTGCTGCGTGGAGCACTTAAAGTCCAGCCTCCAG
GACCGGATGCCCTCCTGCTCCCGCTCCCATCGTGCCCTTAAATGCCAGATCTGGTGGAGGGAAGAGAGAAGAG
GTAGGAAGAAAGGTGATGAAAACCTCCTGGTCAATTCCTTGAATAAA

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FIGURE 1812

GAGGAGGAGGAAAAAGGCCAGCAAAAAGGAAGAGTGGGAGGAGGGGAAGCGCGGAAGGAGGAAGAGGAGGAG
GAGGAAGAGGGGAGCACAAAGGATCCAGGTCTCCCGACGGGAGGTTAATACCAAGAACCATGTGTGCCAGCGGGC
TGGGCCAGTTTCATGACCTTGGCTTTGGTGTGGCCACCTTTGACCCGCGCGGGGGACCGACGCCACCAACCCAC
CCGAGGGTCCCCAAGACAGGAGCTCCACGACGAAAGGCCGCGCTGTCCCTGCAGAATACAGCGGAGATCCAGCACT
GTTTGGTCAACGCTGGCGATGTGGGGTGTGGCGTGTTGAATGTTTCGAGACAACCTCTTGTGAAGATTCGGGGCT
TACATGGGATTTGCATGACTTTTTCTGCACAACGCTGGAAAAATTTGATGCCAGGGCAGTCAATTCATCAAGACG
CCTTGAAATGTAAAGGCCACGCTCTGCGGCACAGGTTCCGGCTGCATAAGCCGGAAGTCCCGGCCATCAGGAAAA
TGGTGTCCCAAGTTGCAGCGGGAATGCTACCTCAAGCACGACCTGTGCGCGGCTGCCAGGAGAACAACCCGGGTGA
TAGTGGAGATGATCCATTTCAAGGACTTGTCTGTCACGAACCCCTACGTGGACCTCGTGAACCTTGTCTGTGACCT
GTGGGGAGGAGGTGAAGGAGGCCATCACCCACAGCGTGCAGGTTCAGTGTGAGCAGAAGTGGGGAAGCCCTGTGCT
CCATCTTGAGCTTCTGCACCTCGGCCATCCAGAAGCCTCCACGGCGCCCCCGAGCGCCAGCCCCAGGTGGACA
GAACCAAGCTCTCCAGGGCCACCACGGGGAAGCAGGACATCACCTCCAGAGCCACGAGTAGGGAGACTTGGCC
GAGGTGCCAAGGGTGAGCGAGGTAGCAAGAGCCACCAACGCCCATGCCGAGGCAGAGTCGGGGGCCCTTGGGG
CTCAGGGACCTTCCGGAAGCAGCGAGTGGGAAGACGAACAGTCTGAGTATTCGTATATCCGAGGTGAAATGAAA
GGCTTGCCACGAAATCTTTCCCTCCACGCCGTCCATTTTCTTATCTATGGACATTCAAAAACATTTACCATTAGA
GAGGGGGGATGTCACACGAGGATTTCTGTGGGACTGTGGACTTCATCGAGGTGTGTGTTTCGCGGAACGGACAGG
TGAGATGGAGACCCCTGGGGCCGTGGGGTCTCAGGGGTGCTTGGTGAATTTCTGCACTTACACGTACTCAAGGGAG
CGCGCCCGCGTTATCTCTGACCTTTGTCTCTTTCCATCTGTGGAGTCACTGGGTGTGCGGCCGTCTGTGTGTGG
GGGAGGTGAACCAAGGAGGGGCGAGGCAAGCGAGGCCCCCAGAGCTGGGCCACACAGTGGGTGTGCGGCCCTGCG
CCCCAAGCTTCTGTGTGCAGCAGCCTCTGTGTCTGTCTCCGCGGAAGTCAAGGCGGGCTGGATTCCAGGACAGGAGT
GAATGTAAAAATAAATATCGTTAGAAATGACGAGAAGGGTGGAGAGGAGCGAGGGCCGAGGGGGTCTTGTGTG
CCAAACTGAAATTCAGTTTCTTGTGTGGGGCCTTGGCGTTCAGAGCTCTTGGCGAGGGTGGAGGGAGGAGTGTCA
TTTCTATGTGTAATTTCTGAGCCATTGTACTGTCTGGGCTGGGGGGGACACTGTCCAAGGGAGTGGCCCTATGA
GTTTATATTTTAAACCATGCTTCAAATCTCGATTTCACTTTTTTATTATCCAGTTATATCTACATATCTGTCA
TCTAAATAAATGGCTTTCAAACAAAGCAACTGGGTCAATAAACACAGCTCAAAGGGGGTTAAAAAAGAGAAATGA
CAGCCCATCCTTTGAGGCTGATTTTCTTTTTTTTAAAGTCTATTTTAAAGCTATCAACAGCGACATAGCCAT
ACATCTGACTGCCTGACATGGACTCTGCCCACTTGGGGGAAACCTTATACCCAGAGGAAAAATACACACCTGGGG
AGTACATTTGACAAATTTCCCTTAGGATTCGTTATCTCACCTTGACCTCAGCCAAAGATTGGTAAAGCTCGCTC
CTGGCGATTCCAGGAGACCCAGCTGGAAACCTGGCTTCTCCATGTGAGGGGATGGGAAAGGAAAGAGAAATGA
AGACTACTTAGTAATTTCCCATCAGGAAATGTGACCTTTTACATAAAATCAAGGAGACTGCTGAAATCTCTAAG
GGACAGGATTTCCAGATCTTAATGGAAATTTAGCAATAAGGAGAGGAGTCCAAAGGGACAAATAAAGCGAGAG
AGAGAGAGAGAGAGAGGAGGAGGAAGAAAAGAGAGAGAGAAAAGAGCCCTCGTGCC

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FIGURE 1813

MCAERLGQFMTLALVLATFDPARGTDATNPPEGQDRSSQQKGRLSLQNTAEIQHCLVNAGDVGCGVFECFENNS
CEIRGLHGICMTFLHNAGKFDAQGKSF IKDALKCKAHALRHRFGCISRKCPAIREMVSQLQRECYLKHDLCAAAQ
ENTRVIVEMIHFKDILLHEPYVDLVNLLTTCGEEVKETHSVQVQCEQNWGSLCSILSFCTSAIQKPPTAPPER
QPQVDRTKLSRAHHGEAGHHLPEPSSRETGRGAKGERGSKSHPNAHARGRVGGLGAQGPSGSSEWEDEQSEYSDI
RR

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FIGURE 1814

GCGGCGCCAGGACTGACTGCGCCGTGGAGGCTGCTGCAGTGTGTGAGTTGGAAGCTGGGGAGCTCGGCATGSGCG
GTCCCCGCTGCAGCCATGGGGCCCTCGGCCGTTGGGCCAGAGCGGCCCGGCTCGATGGCCCCGTGGTGCTCAGTGTG
AGCAGCGGCCCGTCGCGCTACGTGCTTGGGATGCAGGAGCTGTTCCGGGGCCACAGCAAGACGCGCGAGTTCCCTG
GCGCACAGCGCCAAGGTGCACTCGGTGGCCTGAGTTGCGAGCGGCGTCGCCCTAGCCTCGGGGTCCCTTCGACAAG
ACGGCCAGCGTCTCTTGTGCTGGAGAAGGACCGGTTGGTCAAAGAAAAACAATTATCGGGGACATGGGGATAGTGTG
GACCACTTTTGTGGCATCCAAGTAATCCTGACCTATTTGTTACGGCGCTCGGAGATAAAACCATTCGCATCTGG
GATGTGAGGACTACAAAAATGCATTGCCACTGTGAACACTAAAGGGGAGAACATTAAATCTGCTGGAGTCTCGAT
GGGCAGACCAATTGCTGTAGGCAACAAGGATGATGTGGTGACCTTTATTGATGCCAAGACACCCGTTCCAAAGCA
GAAGAGCAGTTCAAGTTCGAGGTCAACGAAATCTCCTGGAACAATGACAATAATATGTTCTTCTCGACAAATGGC
AATGTTGTATCAACATCCTCAGCTACCCAGAACTGAAGCCTGTGCACTCCATCAACGCCCATCCTTCCAACTGC
ATCTGTATCAAGTTTGACCCATGGGGAAGTACTTTGCCACAGGAAGTGAGATGCTTTGGTCAGCCTCTGGGAT
GTGGATGAGTTAGTGTGTTCCGTTGCTTTTCCAGGCTGGATTGGCCTGTGAAGAACCTCAGTTTCAGCCATGAT
GGGAAATGCTGGCGTCAGCATCGGAAGATCATTTATTGACATTGCTGAAGTGGAGACAGGGGACAAACTATGG
GAGGTACAGTGTGAGTCTCCGACCTTCACAGTGGCGTGGCACCCCAAAGGCCCTGCTGGCATTGCTCTGTGAT
GACAAAGACGGCAAAATATGACAGCAGCCGGGAAGCCGGAACGTGAAGCTGTTTGGGCTTCCTAATGATTCTTGA

GAGGAGGTTGTAGGAGAGGAGGCCCGGCAGAGGTCTTCCCTCATGTGGTTAGTTTGGTCTGTTCTCTCGGAGT
TGGTGGGCACCCATAAATTTGTGAAGTTGGTATAAATTGTAACGCTCTCGGTACAGGCTGCGCATTTTCGTTCTTT
TGCTTTGTCTGTGTTATTAGCTTTTCCATTCTTTGCCCCAGCATGAGTTAACTCGCGTGGACTCTGCAGTGCAG
GTAGTGACCCAGCATACCTTGTCTCTGAGACCTCTGTCTTCTCTGCTTCTGGGTGCATGGTAGACTTTTGTGGC
ATTTGATACAACTTGGACAATACCTAGTTTGGAGGGAGGGGAATGGAAGGGCATGGAAGTTTTTTTAAATAATTA
AAAATATATACATATAATTTGAGAAATTGAGCATTTAATAAACTGACTTTTGTATTATGGAAAAAAAAAAAAA
AA

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FIGURE 1815

MAVPAAAMGPSALGQSGPGSMAPWCSVSSGSPSRVVLGMQELFRGHSKTREFLAHSAKVHSAWVSCDGRRLASGSF
DKTASVFLLEKDRLVKENNYRGHDSVDQLCWHPSNPDLFVTASGDKTIRIWDVVRTTKCIATVNTKGENINICWS
PDGQTIIVGNKDDVVTFFIDAKTHRKAEEQFKFEVNEISWNNNDNMFFLTNGNGCINILSYPELKPVQSIHAHPS
NCICIKFDPMGKYFATGSADALVSLWDVDELVCVRCFSRLDWPVRTLSFSHDGKMLASASEDHFDIAEVETGDK
LWEVQCESPTFTVAWHPKRPLLAFAACDDKDGKYDSSREAGTVKLFGLPNDS

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FIGURE 1816

ATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCATTGATATCTCCTTGTGGAAATTTGAGACCAGCAAGTACT
ATGTGACTATCACTGATGCTCCAGGACACAGAGACTTCATCAAAAACATGATTACAGGGACATCTCAGGCTGACT
GIGCTGTCCCATTGTTGCTGCTGGTGTGGTGAATTTGAAGCTGGTATCTCTAAGAATGGGCAGACCCGAGAGC
ATGCCCTTCTGGCTTACACACTGGGTGTGAAACAATAATTGTTGGTGTTAACAAAATGGAAGTCAGCACTTACA
TTAAGAAAATTTGGCTACAACCCCGACACAGTAGCATTGTGCCAATTTCTGGTTGGAATGGTAACAACATGCTGG
AGCCAAAGTGCTAACATGCCTTGGTTCAAGGATGGAAAGTCACCCGTAAGGATGGCAATGCCAGTGGAAACCATGC
TGCTTGAGGCTCTGGACTGCATCCTACCACCAACTCGTCCAACCTGACAAGCCGGCCAAATAAGCGCGTGGCTATG
CCCCATGTAATTGGATTGTCACACGGCTACATATTGCATGCAAGTTTGCTGAGCTGAAGGAAAAGATTGATCGC
CGTTCTGGTAAAAAGCTGGAAGATGGCCCTAAATTCTTGAAGTCCGGTGATGCTGCCATTGTTGATATGGTTTCT
GGCAAGCCCATGTGTGCTGAGAGCTTCTCAGACTATCCACCTTTGGGTCGCTTTGCTGTTGCTGATATGAGACAC
ACAGITGCGGTGGGTGTCATCAAAGCAGTGGACAAGAAGGCTGCTGGAGCTGGCAAGGTACCAACTCTGCCCAG
AAAGCTCAGATGGCTAAATGAATATTATCCCTAATACCTGCCACCCCACTCTTAATCAGTGGTGAAGAACGGTC
TCAGAACTGTTTGTTCATTTGGCCATTTAAGTTTAGTAGTAAAGACTGGTACTTTTTAATGGAACAACATTGA
CCAAAAATTTGTACAGAAATTTGAGACCCATTAAAAAGTTTAAATGAG

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FIGURE 1817

GGGTCAGAACTGCGGCCGATCCCAACGAGGCTCCCTGGAGCCGACGCAGAGCAGCGCCCTGCGCGGGCCAA
GCAGGAGCCGGCATCATGGATTCCCTCAAAGTAGTGCTGGAGGGGCCAGCACCTTGGGGCTTCCGGCTGCAAGGG
GGCAAGGACTCAATGTGCCCTCTCCATTTCCCGGCTCACTCCTGGGGGCAAGCGGCGCAGGCCGGAGTGCC
GTGGGTGACTGGGTGCTGAGCATCGATGGCGAGAATGCGGGTAGCCTCACACACATCGAAGCTCAGAACAAGATC
CGGGCCTGCGGGGAGCGCCTCAGCCTGGGCTCAGCAGGGCCCAGCCGGTTCAGAGCAAAACCGCAGAAGGTACGA
GGCTGGCCGGGACATCCGGGCGGTGGGCGGTGTGGGCTTGGACGGCCAGGCCTGCTCGCCCTCCTGGCACATTCT
CGGTACCCCAATCCCTGCGCGGAGTGGAGGGCAGAAACCGGAGCTAAGGCGGGTCTAGGGCCCTGGAGTTGAGC
CAGGGGCTGCTGCACGGTCTGGCACACGCATGTCCGCCGTGTCTGTCCGCTGTCTGTCCGCTGCTGCTGCCCTGCTGCCCTCC
GCCGCCGGCGCTGCGTGCTGCCCGCACTCGGTCAGCCCTCGGTCTGCGTGAGCTGAGATCGCCACTCCCAAAT
GGGCCCTTGAAACCTGAGTCGTCTCTCCCGTAGCCTCCAAATAGATGTAGGGGGTGGGGTGGGGTGGGGG
CTGGAGCTGCCGCTGTCTCTGCTGCAGGCGCC

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FIGURE 1818

AATGGAGGAGTCGGAACCCGAACGGAAGCGGGCTCGCACCGACGAGGTGCCTGCCGGAGGAAGCCGCTCCGAGGC
GGAAGATGAGGACGACGAGGACTACGTGCCCTATGTGCCGTTACGGCAGCGCCGGCAGCTACTGCTCCAGAAGCT
GCTGCAGCGAAGACGCAAGGGAGCTCGGAGGAAGAGCAGGACAGCGGTAGTGAACCCCGGGGAGATGAGGA
CGACATCCCGCTAGGCCCTCAGTCCAACGTGAGCCTCCTGGATCAGCACCAGCACCTTAAAGAGAAGGCTGAAGC
GCGCAAGAGATCTGCCAAGGAGAAGCAGCTGAAGGAAGAAGAGAAGATCCTGGAGAGTGTTCGCGAGGGCCGAGC
ATTGATGTCAGTGAAGGAGATGGCTAAGGGCATTACGTATGATGACCCCATCAAAACCAGCTGGACTCCACCCCG
TTATGTTCTGAGCATGTCTGAAGAGCGACATGAGCGCGTGCAGGAAGAAATACCACATCCTGGTGGAGGGAGACGG
TATCCACCACCACCATCAAGAGCTTCAAGGAATGAAGTTTCTGCAGCCATCCTGAGAGGCCCTGAAGAAGAAAGG
CATTACACCACCAACACCCATTAGATCCAGGGCATCCCCACCATTTCTATCTGGCCGTGACATGATAGGCATCGC
TTTCACGGGTTACGGCAAGACACTGGTGTTCACGTTGCCCGTCATCATGTTCTGCCTGGAACAAGAGAAGAGGTT
ACCCITCTCAAAGCGCGAGGGGCCCTATGGACTCATCATCTGCCCTCGCGGGAGCTGGCCCGCAGACCCATGG
CATCCTGGAGTACTACTGCCGCTGCTGCAGGAGGACAGCTCACCACTCCTGCGCTGCGCCCTTGCATTGGGGG
CATGTCCGTGAAAGAGCAGATGGAGACCATCCGACACGGTGTACACATGATGGTGGCCACCCGGGGCGCCCTCAT
GGATTGCTGCAGAAGAAGATGGTCAGCCTAGACATCTGTCGCTACCTGGCCCTGGACGAGGCTGACCGCATGAT
CGACATGGGCTTCGAGGGTGACATCCGTACCAICTTCTCCTACTTCAAGGGCCAGCGACAGACCTTGCTCTCAG
TGCCACCATCGCGAAGAAATTAGAACITTTGCTAAGAGTGCCTTTGTAAGCCTGTGACCATCAATGTGGGGCG
CGCTGGGGCTGCCAGCCTGGATGTCATCCAGGAGGTAGAATATGTGAAGGAGGAGGCCAAGATGGTGTACCTGCT
CGAGTGCCTGCAGAAGACACCCCGCCTGACTCATCTTGCAGAGAAGAAGGCAGACGTGGACGCCATCCACGA
GTACCTGCTGCTCAAGGGGGTTGAGGCCGTAGCCATCCATGGGGGCAAAGACCAGGAGGAACGGACTAAGGCCAT
CGAGGCATTCCGGGAGGGCAAGAAGGATGCTCTAGTAGCCACAGACGTTGCCCTCAAGGGCCTGGACTTCCTGCG
CATCCAGCACGTATCAATTATGACATGCCAGAGGAGATTGAGAACTATGTACACCGGATTGGCCGACCCGGGGC
CTCGGGAACACAGGCATCGCCACTACCTTCATCAACAAAGCGTGTGATGAGTCAGTGCATGATGGACCTCAAAGC
GCTGCTGCTAGAAGCAAGCAGAAGGTGCCGCCGTGCTGCAGGTGCTGCATTGCGGGGATGAGTCCATGCTGGA
CATTGGAGGAGAGCGCGGCTGTGCCTTCTGCGGGGGCCTGGGTATCAGGATCACTGACTGCCCAAACTCGAGGC
TATGCAGACCAAGCAGGTGACGAACATCGGTGCGAAGGACTACCTGGCCCAAGCTCCATGGACTCTGAGCCGA
CAGTCTTCCCTTCTCTCAAGAGGCCCTCAGTCCCCAAGACTGCCACCAGTCTACACATACAGCAGCCCCCTGGAC
AGAATCAGCATTTAGCTCAGCTGGCCTGGGATGGGCAGGCTGGTCTGGCTGCCTGTTCCCTGTGCTCTCAG
AATTACTGTTTTTGTTCCTTTACCCAGCTGCCATTAAGGCCAAACCTCTAGCCC

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FIGURE 1819

GCAAGATGGCTGTGGAGCTGGGCGTGCTGCTCGTCCGGCCCCGGCCCGGAACCGGGCTGGGTAGAGTGATGCGGA
CCCTCCTGCTGGTGCTGTGGCTGGCGACGCGCGGAAGCGCGCTCTACTTTCACATCGGAGAGACGGAGAAGAAGT
GCTTTATTGAGGAGATCCCGGACGAGACCATGGTCATAGGAACTACCGGACGCGAGCTGTATGACAAGCAGCGGG
AGGAGTACCAGCCGGCCACCCCGGGGCTTGGCATGTTTGTGGAGGTGAAGGACCCAGAGGACAAGGTCATCCTGG
CCCCGCAGTATGGCTCCGAGGGGAGGTTCACTTTCACCTTCCCATACCCCTGGTGAGCACCAGATCTGTCTTCACT
CCAATTCACCAAGTTCTCCCTCTTTGCTGGAGGCATGCTGAGAGTTTACCTGGACATCCAGGTAGGTGAACATG
CCAATGACTATGCAGAAATTGCTGCTAAAGACAAGTTGAGTGAGTTGCAGCTACGAGTGCGACAGCTGGTGGAAAC
AAGTGGAGCAGATCCAGAAAAGCAGAACTACCAGCGGTGGCGAGAGGAGCGCTTCCGGCAGACCAGTGAGAGCA
CCAACCAGCGGGTGCTGTGGTGGTCCATTCTGCAGACCCCTCATCTCGTGGCCATCGGTGTCTGGCAGATGCGGC
ACCTCAAGAGCTTCTTTGAAGCCAAGAAAGCTTGTGTAGCTGTCCCAGGCGTCACAACCCATCTCCAGGCTGGG
GGAGGGGAATGGCAGGCAAGCCAGTCTTCTGTCTTCCTT

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FIGURE 1820

GCCTCCGCCCCCGCCGCGGACCTCCGCGGTACACCTTGCACCCAGCGTCTCCCTCTACAAGACGGCCCGGCCCT
TTGGTGCGCCCCCGCCGCTGACAGCGCCCGCAGCAGAATGGACAGCCGCTCCGACCGCTGGTCCAGATGCCA
GCAAGCAGCGGCTGATGGAGAACAACAGAGGACTGGCGCCCGCGCCGGGGACAGGCCAGTCGCGTTCCCTCCGCA
TCCTTGCCACCTCACAGGCACCGAGTTTCATGCAAGACCCGGATGAGGAGCACCTGAAGAAATCAAGCCAGGTGC
CCAGGACAGAAGCCCCAGCCCGCAGCCTCATCTACACCCAGGAGCCCTGGCCCTGGCCCTACCGCCCCAGCCCTA
CCAGCCCGCCGCCCTGGGCTGTGGACCTGCGTTTGCCGAGCGCTATGCCCCGGACAAAACGAGCACAGTGCTGA
CCCGGCACAGCCAGCCGCGCCACGCCCGCTGCAGAGCCGCACTCCATTGTGCAGGCAGCTGCCGAGGGG
TGCCAGGAGGGGGCAGCAACAACGGCAAGACTCCCGTGTGTACCCAGTGCCACAAGGTTCATCCGGGGCCGCTACC
TGGTGGCGCTGGGCCACGCGTACCACCCGGAGGAGTTTGTGTGTAGCCAGTGTGGGAAGGTCTCGAAGAGGGTG
GCTTCTTTGAGGAGAAGGGCGCCATCTTCTGCCACCATGCTATGACGTGCGCTATGCACCCAGCTGTGCCAAGT
GCAAGAAGAAGATTACAGGCGAGATCATGCACGCCCTGAAGATGACCTGGCACGTGCACCTGCTTTACCTGTGCTG
CCTGCAAGACGCCCATCCGGAACAGGGCCCTTCTACATGGAGGAGGCGTGCCTATTGCGAGCGAGACTATGAGA
AGATGTTTGGCACGAAATGCCATGGCTGTGACTTCAAGATCGACGCTGGGGACCGCTTCTGGAGGCCCTGGGCT
TCAGCTGGCATGACACCTGCTTCGTCTGTGCGATATGTCAGATCAACCTGGAAGGAAGAGACCTTCTACTCCAAGA
AGGCAGGCCCTCTCTGCAAGAGCCATGCCTTCTCTCATGTGTAGGCCCTTCTGCCCCACAGCTGCCGCGGTGGCC
CCTAGCCTGAGGGGCCCTGGAGTCGTGGCCCTGCATTTCTGGGTAGGGCTGGCAATGGTTGCCCTTAACCCCTGGCTC
CTGCCCCAGCCTGGGGCTCCCTGGGCCCTGCCCAACCCACCTTATCCTCCCAACCCACTCCCTCCACACCA
GCACACCGGTGCTGGCCACACGAGCCCTTTTACCTCCAGTGCCACAATAAACCTGTACCCAGCTG

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FIGURE 1821

AGGTGGAGCAAGATGGCTGTGGAGCTGGGCGTGTCTGCTCCGGCCCCGGCCCCGAACCGGGCTGGGTAGAGTG
ATGCGGACCCCTCCTGCTGGTGTGGCTGGCGACGCGCGGAAGCGCGCTCTACTTTCACATCGGAGAGACGGAG
AAGAAGTGCTTTATTGAGGAGATCCCGGACGAGACCATGGTCATAGGAAACTACCGGACGCAGCTGTATGACAAG
CAGCGGGAGGAGTACCAGCCGGCCACCCCGGGGCTTGGCATGTTTGTGGAGGTGAAGGACCCAGAGGACAAGGTC
ATCCTGGCCCGGCAGTATGGCTCCGAGGGCAGGTTCACTTTCACCTCCCATACCCCTGGTGAGCACCAGATCTGT
CTTCACTCCAATTCACCAAGTTCTCCCTCTTTGCTGGAGGCATGCTGAGAGTTACCTGGACATCCAGGTAGGT
GAACATGCCAATGACTATGCAGAAATTGCTGCTAAAGACAAGTTGAGTGAGTTGCAGCTACGAGTCCGACAGCTG
GTGGAAACAAGTGGAGCAGATCCAGAAAGAGCAGAACTACCAGCGGTGGCGAGAGGCGCTTCCGGCAGACCAGT
GAGAGCACCAACCAGCGGGTGTGTGGTGGTCCATTCTGCAGACCCCTCATCCTCGTGGCCATCGGTGTCTGGCAG
ATGCGGCACCTCAAGAGCTTCTTTGAAGCCAAGAAGCTTGTG**TAG**CTGTCCCAGGCGTCACAACCCATCCTCCCA
GGCTGGGGGAGAAAGGACCTCCTGGAACTGACTTCTTCTGTGTCAGGAGGACTGGTTTTCCAGCCATACCTGTTCTGG
AAGGGAGAGGGGCTGGAGGCACCCACAGGCACAAGCTGAAGGCAGCAGCTTGGCTAATACTAGCAGGTAGTGGG
GCAAATTCCTGCCCTCTCTCTGGCCTCTGGGCCGTTTGGTAGTAATCACCAGGGGCTGGTAAAGCCCTCCT
CTTGGCACCTCAGAATCACAGTGTTACTGATCAGGGATGTGAGGCTGCTGTTGGGGGTGGGGGGAGGGGAATGGG
CAGGCAAGCCAGTCTTCTGTCTTCCCTTGCTAACTTAGGGTTTTGAGCAGGTGGGGGTATGGTGCCTGTATACC
CACCTGCCACCCCTGGGAACCTCACTGTTCTCTCTTTACGCCTAGACCTGATCCAGGGTGCTGTGTGAGTTGAG
GGTGGGTGGAGGGGTTTTGAGTGTGGGAATGTGGCCCTGCAGTTGACCTGAGCTGCTTACATGGTGTCCATTTC
TGGGGCTTAAAGAACTGGGACCAAGTAGAGGCCTTGGTGTGGTTGGGGTGGGGCTGCAGAGTCTTAGT
TACTGATTTCAATTTCAATAAATGTAGGTTTGTACATGAGTTCCCAATAAAAAAAAAAATG

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FIGURE 1822

MRTLLLVWLATRGSAFYFHIGETEKKCFIEEIPDETMVIGNYRTQLYDKQREEYQPATPGLGMFVEVKDPEDKV
ILARQYGSSEGRFTFTSHTPGEHQICLHSNSTKFSLFAGGMLRVHLDIQVGEHANDYAEIAAKDKLSELQLRVRL
VEQVEQIQKEQNYQRWREERFRQTSESTNQRLWWSILQTLILVAIGVWQMRHLKSFFEAKKL

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FIGURE 1823

AATGGAGGAGTTCGGAACCCGAAACCGAAGCGGGCTCGCACCGACGAGGTGCCTGCCGGAGGAAGCCGCTCCGAGGC
GGAAAGATGAGGACGACGAGGACTACGTGCCCTATGTGCCGTTACGGCAGCGCCGGCAGCTACTGCTCCAGAAGCT
GCTGCAGCGAAGACGCAAGGGAGCTGCGGAGGAAGAGCAGCAGGACGCGTAGTGAACCCCGGGGAGATGAGGA
CGACATCCCGCTAGGCCCTCAGTCCAACGTACGCCCTCTGGATCAGCACCAGCACCTTAAAGAGAAGGCTGAAGC
GCGCAAGAGTCTGCCAAGGAGAAGCAGCTGAAGGAAGAAGAGAAGATCTGGAGAGTGTTGCCGAGGGCCGAGC
ATTGATGTCTAGTGAAGGAGATGGCTAAGGGCATTACGTATGATGACCCCATCAAAACACAGCTGGACTCCACCCCG
TTATGTTCTGAGCATGTCTGAAGAGCGACATGAGCGCGTGCAGGAAGAAATACCACATCCTGGTGGAGGGAGACGG
TATCCCAACCCCATCAAGAGCTTCAAGGAAATGAAGTTTCTCGCAGCCATCTCTGAGAGGCTGAAGAAGAAGG
CATTACACCCCAACACCCATTACAGATCCAGGGCATCCCAACCATTTCTATCTGGCCGTGACATGATAGGCATCCG
TTTCACGGGTTACGGCAAGACACTGGTGTTCACGTTGCCCGTCATCATGTTCTGCCTGGAACAAGAGAAGAGGTT
ACCCITCTCAAAGCGCGAGGGGCCCTATGGACTCATCATCTGCCCTCGCGGAGCTGGCCCGGCAGACCCATGG
CATCTCGGAGTACTACTGCCGCTGCTGCGAGGAGCAGCTCACCCTCTGCGCTGCGCCCTCTGCATTGGGGG
CATGTCCGTGAAAGAGCAGATGGAGACCATCCGACACGGTGTACACATGATGGTGGCCACCCCGGGGCGCCTCAT
GGATTGTCTGCAAGAAGATGGTCAGCCTAGACATCTGTGCTACCTGGCCCTGGACGAGGCTGACCGCATGAT
CGACATGGGCTTCGAGGGTGACATCCGTACCATCTTCTCCTACTTCAAGGGCCAGCGACAGACCTGCTCTTCAG
TGCCACCATGCCGAAGAAGATTGCAAACTTTGCTAAGAGTGCCCTTGAAGCCTGTGACCATCAATTGGGGGCG
CGCTGGGGCTGCCAGCCTGGATGTCTACAGGAGGTAGAATATGTGAAGGAGGAGGCCAAGATGGTGTACCTGCT
CGAGTGCTCTGCAAGAAGACACCCCGCTGTACTCATCTTTGCAGAGAAGAAGGCAGACGTGGACGCCATCCACGA
GTACCTGCTGCTCAAGGGGTTGAGGCCGTAGCCATCCATGGGGGCAAGACAGGAGGAACGGACTAAGGCCAT
CGAGGCATTCCGGGAGGGCAAGAAGGATGTCTAGTAGCCACAGACGTTGCCTCCAAGGGCCTGGACTTCCCTGC
CATCCAGCACGTATCAATTAAGCATGCCAGAGGAGATTGAGAACTATGTACACCGGATTGGCCGCACCGGGCG
CTCGGGAACACAGGCATCGCCACTACCTTCATCAACAAGCGTGTGATGAGTCAGTGCTGATGGACCTCAAAGC
GCTGCTGCTAGAAGCAAGCAGAAGGTGCCGCCGTGCTGCAAGTGCTGCATTGCGGGGATGAGTCCATGCTGGA
CATTTGGAGGAGAGCGCGGCTGTGCTTCTGCGGGGGCTGGGTGTCATCGGATCACTGACTGCCCAAACTCGAGGC
TATGACAGCAAGCAGGTGAGCAACATCGGTGCAAGGACTACCTGGCCCAAGCTCCATGGACTTCTGAGCCGA
CAGTCTTCCCTTCTCTCAAGAGGCCCTCAGTCCCAAGACTGCCACAGCTCTACACATACAGCAGCCCTGGAC
AGAATCAGCATTTACGCTCAGCTGGCTGGAATGGGCCAGGCTGGTCTGCTGCTGCTTCCCTGTGCTCTTCAG
AATTACTGTTTTTGTTCCTTTTACCCAGCTGCCATTAAAGCCCAACCTCTAGCC

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FIGURE 1824

CCCAACGAGGCTCCCTGGAGCCCGACGCAGAGCAGCGCCCTGGCCGGGCCAAGCAGGAGCCGGCATC**ATG**GATTG
CTTCAAAGTAGTGCTGAGGGGGCCAGCACCTTGGGGCTTCGGGCTGCAAGGGGGCAAGGACTTCAATGTGCCCT
CTCCATTTCGGGCTCAGTCTCTGGGGGCAAGCGGCCAGGCCGGAGTGCCGTGGGTGACTGGGTGCTGAGCAT
CGATGGCGAGAATGCGGGTAGCCTCACACACATCGAAGCTCAGAACAAAGATCCGGGCTCGGGGAGCGCCTCAG
CCTGGGCTCAGCAGGGGCCAGCCGGTTCAGAGCAACCGCAGAGGCCCTCCGCCCCCGCGGGACCTCCGG
GTACACCTTTGACCCACGCTCTCCCTCAACAAGACGGCCCGGCCCTTTGGGGCGCCCCGCGCTGACAGCGC
CCCCGACGAGAATGGACAGCCGCTCCGACCCTGGTCCAGATGCAGCAAGCAGCGGCTGATGGAGAACACAGA
GGACTGGCGGGCCGGCCGGGACAGGCCAGTCGCTTCCTTCCGCATCCTTGCCCACTTCAGGACCCGAGTT
CATGCAAGACCCGGATGAGGAGCACCTGAAGAAATCAAGCCAGGTGCCAGGACAGAAGCCCGACCCAGCCTC
ATCTACACCCAGGAGCCCTGGCCTGGCCCTACCGCCCCAGCCCTACCAGCCGCCCCCTGGGCTGTGGACCC
TGCGTTTGCGAGCGCTATGCCCGGACAAAACGAGCAGATGCTGACCCGGCAGCAGCCGCGCCACGCCAC
GCCGCTGCAGAGCCGACCTCCATTGTGCAGGCAGCTGCCGAGGGGTGCCAGGAGGGGGCAGCAACACGGCAA
GACTCCCGTGTGCACAGTGCCACAAGGTATCCGGGGCCGCTACCTGGTGGCGCTGGGCCACGCGTACCACCC
GGAGGAGTTTGTGTAGCCAGTGTGGGAAGTCTTGAAGAGGGTGGCTTCTTTGAGGAGAAGGGCGCCATCTT
CTGCCACCATGCTATGACGTGCGCTATGCACCCAGCTGTGCCAAGTGAAGAAGAAGATTACAGCGAGATCAT
GCACGCCCTGAAGATGACCTGGCACGTGCATGCTTTACCTGTGCTGCTGCAAGACGCCCATCCGGAACAGGGC
CTTCTACATGGAGGAGGGCGTGCCCTATTGCGAGCGAGACTATGAGAAGATGTTTGGCACGAAATGCCATGGCTG
TGACTTCAAGATCGACGCTGGGACCCGCTTCTGGAGGCCCTGGGCTTCAGCTGGCATGACACCTGCTTCGTCTG
TGCGATATGTCAGATCAACCTGGAAGGAAGACCTTCTACTCCAAGAAGGACAGGCCCTCTGCAAGAGCCATG
CTTCTCTCATGTG**TGAG**CCCCCTTCTGCCACAGCTGCCCGGTGGCCCCCTAGCCTGAGGGGCTGGAGTGTGGC
CCTGCAATTTCTGGGTAGGGCTGGCAATGTTGCCCTTAACCTTGGCTCTGGCCCCGAGCTGGGCTCCTGGGGC
CTGCCCCACCCACCTTATCCTCCACCCCACTCCTCCACCACACAGCACCCGGTGCTGGCCACACCGCCCC
CTTTCACCTCCAGTGCCACAATAAACCTGTACCCAGCTG

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FIGURE 1825

MDSFKVVLEGPAPWGFRLQGGKDFNVPLSISRLTPGGKAAQAGVAVGDWVLSIDGENAGSLTHIEAQNKIRACGE
RLSLGLSRAQPVQSKFPQKASAPAADPPRYTFAPSVSLNKTARPPGAPPPADSA PQNQQLRPLVDPASKQRLME
NTEDWRPRPGTGQSRSFRI LAHLTGTEFMQDPDEEHLKKSSQVPRTEAPAPASSTPQEPWPGPTAPSPTSRPPWA
VDPAPFAERYAPDKTSTVLTRHSQFATPTPLQSRSTSIVQAAAGGVPGGGSNNGKTPVCHQCHKVIRGRYLVALGHA
YHPEEFVCSQCGKVL EEGGFEEKGAIFCPPCYDVRYAPSCAKCKKKITGEIMHALKMTWHVHCFTCAACKTPIR
NRAFYMEEGVPY CERDYEKMFGTKCHGCDFKIDAGDRFLEALGFSWHDTCFVCAICQINLEGKTFYSKKDRPLCK
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FIGURE 1826

GGGGGCGCGCCCCGCGCCTCCAGCCAGCGCTCGGAGCCGCTTTCGCTGCCACTGTCTGCTCCCCGGGGCGC
CGCCGCTCCCCCGCAGGCCCGGGGCTCTGTCCGCTGGGCCGCGCTGCTCGCCCCGGGCCAGGAGAACGAGCT
CGAGGAGGATGCTGGGCCCGGTGCAAGGTTCCCTCTCACCCGACGTGTGGAGAGGAGGAAGCGGAAGTAGA
GATGCCCATCTGGAGTGAGTGACGAGCACAGGTCCCGCGCGGCCCGGGTGAGGCACGCCGCGCGCCCCGGCG
CCATGGGAAGGAGCGGGCGCGCTGCTGTCCCCCGCGCGCGCGCACGACTTGAGACCTGCCACGGGCAGCCCC
CGGCGCGGGTCCCGAGTGACGCTGGCGGCACCTGAGAGTGTGGCGCGGGCCCCGGGGCCACGCAGCGGAGCCCA
GTGTCCAGTGAAGCGTCTGAGGACCCGCGCGCCGTGCCGCGCCATGCTGATGTCCCAGGGCACCTACAGTTCC
TCACGTGCTTCGCGCGCTTCTGCTCATCTGGGGTCTCATGTCCTGCTGCTGCTGCTTCTGCAGCTTCTTGGCGC
GCCGCTCAAACGGCGCCAGGAGGAGCGACTGCGCGAGCAGAACCTGCGCGCTTAGAGCTGGAGCCCTCGAAC
TCGAGGGCAGTCTGGCGGGAGTCCCCGGGCGTGGCGCGCGCGCAGCCACACACCGTAGCGCTTGGAGG
CGCCGCTCACGCGCACTCGCATCCGCACGTGCACGTGCACCGCTGCTGCACACCGGGCCGCGACGCCGACG
CGCACGCGCACCCACACCGCACACCGCGCTCCCGCACCGCGCTACGCACCTGTCGGTGCCGCCACCGG
CCTGGAGCTACCGCGCCAAGCGGAATCGACATGTCAAACACCGTGTACGAAGAGGCGGTGCTGATGGCAG
AGCCGCGCGCGCCCTATAGCGAGGTGCTCACGGACACGCGCGCTCTACCGCAAGATCGTCACGCCCTTCCTGA
GTGCGCGCACAGCGCGGAAGAAGAGGAGCAGCGCTCCAGCTACAAGCGCTCTTCTGGACCGGGGTACA
CCTCGCGCTGCACCTGCCAGCGCCCTCGGCGCGCGCCCTGCCAGCCCTCTGCTGACGGCGGCGTACA
GCCGCGGGTCTTCCAGCTGGACCGACTCAGAGCTCAGACCGCGAGCCCTGGAGCAGGAGCTTGGCGTC
TGCCGGTCTCCATCCCTTGTTCGGGAGGACTACAGCCGTATAGAGGGGCGCCCGCGCCCGGGCCCCACCGGC
GGACTCTCGGCTGACTCGGGGCTTTTAAATGCTTCCCTGGACTCGGGGAGGGCGGGGGAGGGAGGAT
TCTTATCCGTTTGTATACATTTGAGGATAATAAAGGTGTGTGATCTGGTTTGGTGAIAAAAAAAAAAAAAAA
AAAAAAAA

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FIGURE 1827

MVMSQGTYTFLTCFAGFWLIWGLIVLLCCFCNFLRRRLKRRQEEERLREQNLRALALELEPLELEGLAGSPPGLAPP
QPPPHRSRLEAPAHASHPHVHVHPLHHGPAQPHAHAPHPHHHALPHPPPTHLSVPPRPWSYPRQAESDMSKP
PCYEEAVLMAEPPPPYSEVLIDTRGLVRKIVTFPLSRSDSAEKQEPPPSYKPLFLDRGYTSALHLPAPRPAPP
CPALCLQADRGRVFPFSWTDSELSSREPLEHGAWRLPVSIPLFGRTTAV

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FIGURE 1828

CTATTGATCTGGACTCTTGATAGGCAGCTGGACCAACGGACGGACGCCATGAGGGGCTCTGCTGCTCCTGGGGTT
CCTGCTGGTGAGCTTGGAGTCAACACTTTTCGATTCCACCTTGGGAAGCCCCAAGGAGCATAAGTACAAAGCTGA
AGAGCACACAGTCGTCTTCTCACTGTACCGGGAGCCCTGCCACTTCCCTTCCAGTACCACCGGCAGCTGTACCA
CAAATGTACCCACAAGGGCGGGCCAGGCCCTCAGCCCTGGTGTGCTACCAACCCCAACTTTGATCAGGACCAGCG
ATGGGGATACTGTTTGGAGCCCAAGAAAGTAAAGACCCTGCAGCAAAACACAGCCCTTGCAGAAAAGGAGGGAC
CTGTGTGAACATGCCAAGCGGCCCCACTGTCTCTGTCCACAACACCTCTACTGGAACCACTGCCAGAAAAGAGAA
GTGCTTTGAGCCTCAGCTTCTCCGGTTTTTCCACAAGAAATGAGATATGGTATAGAAGTACGCAAGCAGCTGTGGC
CAGATGCCAGTGCAAGGGTCTGTATGCCCACTGCCAGCGGCTGGCCAGCCAGGCTGCCGCACCAACCCGTGCCT
CCATGGGGGTCTGCTGCTTATAGAGTGGAGGGCCACCGCCTGTGCCACTGCCCGGTGGGTACACCGGACCCCTTCTG
CGACGTGGACCAAGGCAAGCTGTATGATGGCCGGGGCTCAGCTACCGCGCCTGGCCAGGACCACGCTCTC
GGGTGCGCCTGTACGCGTGGGCCCTCGGAGGCCACCTACCGGAACGTGACTGCCAGCAAGCGCGGAACCTGGGG
ACTGGGCGGCCACGCTTCTGCCGGAACCCGGACAACGACATCCGCCCGTGGTGTCTCGTGTCTGAACCGCGACCC
GCTGAGCTGGGAGTACTGCGACCTGGCACAGTGCCAGACCCCAACCCAGGCGGCGCCTCCGACCCCGGTGTCCCC
TAGGCTTCATGTCCCACTCATGCCCGCGCAGCCGGCACCGCCGAAGCCTCAGCCACGACCCGGACCCCGCTCA
GTCCAGACCCCGGGAGCCTTGCCGGCGAAGCGGGAGCAGCCGCTTCCCTGACCAGGAACCGCCCACTGAGCTG
CGGGCAGCGGCTCCGCAAGAGTCTGTCTTCGATGACCCGCGTCTGTGGCGGGCTGGTGGCGCTACGCGGGGCGCA
CCCCATACATCGCCCGCTGTACTGGGGCCACAGTTTCTGCGCGCGCAGCCTCATCGCCCCCTGTGGGTGCTGAC
GGCCGCTCACTGCCTGCAGGACCGGCCCGCACCCGAGGATCTGACGGTGGTGTCTCGCCAGGAACCGCGTAACCA
CAGCTGTGAGCCGTGCCAGACGTGGGCCGTGCGCTCCTACCGCTTGACAGAGGCCTTCTCGCCGCTCAGTACCA
GCACGACCTGGCTCTGTTCGCGCTTCAGGAGGATGCGGACGGCAGCTGCGCGCTCTGTGCGCTTACGTTACGCC
GGTGTGCTGCCAAGCGGCGCGCGGACCTCGAGACCACGCTCTGCCAGGTGGCGGCTGGGGCCACCAAGTT
CGAGGGGGCGGAGGAATATGCCAGCTTCTCGAGGAGGCGCAGGTACCGTTTCTCTCCTGAGGCGCTGTCTCAGC
CCCGGACGTGCACGGATCCTCCATCTCCCCGCATGCTCTGCGCAGGGTTCTCTGAGGGCGGCGCCAGTATGCGTG
CCAGGGTGATTCCGGAGGCGCGCTGTGTGTGAGGACCAAGCTGCAGAGCGCGGCTCACCTGCAAGGCATCAT
CAGCTGGGGATCGGGCTGTGGTGACCGCAACAGCCAGGCGTCTACACCGATGTGGCTACTACCTGGCCCTGGAT
CGGGAGCACACCGTTTCTCGATGCTCAGGGACTCATCTTCCCTCTTGGTGATTCCGAGTGAGAGAGTGGC
TGGGGCATGGAAGGCAAGATTGTGCTCCATTCCCCAGTGCGGGCAGCTCCGCGCAGGATGGCGAGGAACCTCAA
TAAAGTGCTTTGAAAATGCTGAG

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FIGURE 1829

MRALLLLGFLVLSLESTLSIPPWEAPKEHKYKAEHTVVLTVTGEPCHFFPQYHRQLYHKCTHKGRPGPQWCAT
TPNFDQDQRWGYCLEPKVKDHCSKHSPCQKGGTCVNMPSGPHCLCPQHLTGNNHCQKEKCFEPQLRFFHKNEIW
YRTEQAAVARCQCKGPDHQCRLASQACRTNPCLHGGRCLVEGHRCLCHCPVGYTGPFCDVDTKASCYDGRGLSY
RGLARTTSLGAPCQPWASEATYRNVTAEQARNWGLGGHAFCRNPNDNDRPWCFLNDRDLSWEYCDLAQCQTPTQ
AAPPTPVSPRLHVPLMPAQPAAPPKPQPTTRTPPQSQTGALPAKREQPPSLTRNGPLSCGQRLRKSLSMTRVVG
GLVALRGAHPYIAALYWGHSFAGSLIAPCWVLTAAHCLQDRPAPEDLTVVLGQERRNHSCPEQCQTLAVRSYRLH
EAFSPVSYQHDLALLRLQEDADGSCALLSPYVQPVCLPSGAARFSETTLQCVAGWGHQFEGAEYYASFLEAQVP
FLSLERCSAPDVHGSSILPGMLCAGFLEGGTDACQDSCGGLVCEQAAERRLTLQGIISWGS CGDRNKPGVYT
DVAYYLAWIREHTVS

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FIGURE 1830

ATCGCGGCGGAAGGCTGGATTGGCGTTGGGGCTGGGGCCGGCGGTGCCTGGGAAGGCCTGGGCTTCTCGGCCCC
GGCCCTGGCCCCACTACACCTCTCTTTCTCTTTTGTGTTGGGGTCTGTGACTGCGGATATAACTGACGGCAAC
AGTGAACATCTCAAGCGGGAGCATTCGCTCATTAAGCCCTACCAAGGGGTGCGTTCCAGCTCTATGCCCTCTGG
GACTTCCAGGGCAGCACTATGCTCAGGAGCCAGTACGTACGTCTGACCCCTGACGAGCGCAGCAAAGAGGGCTCT
ATCTGGAACCAACAGCCGTGCTTCCTCAAAGACTGGGAAATGCACGTCCACTTCAAAGTCCACGGCACAGGGAAG
AAGAACCTCCATGGAGACGGCATCGCCTGTGGTACACCCGGGACCGCCTCGTGCCAGGGCCTGTGTTTGGAAAGC
AAAGATAACTTCCACGGCTTAGCCAATCTTCCTGGACACCTACCCCAATGATGAGACCACCTGAGCGCGTGTCCCG
TACATCTCGGTGATGGTGAACAATGGCTCCCTGTCTACGACCACAGCAAGGATGGGCGCTGGACCGAGCTGGCG
GGCTGCACGGGTGACTTCCGCAACCGCGATCAGGACACCTTCCTGGCTGTGGCTACTCCCGGGGCCGTGTGACG
GTGATGACCGACCTGGAGGACAAGAACGAGTGGAAACTGCATTGACATCACGGGAGTGCGCCTGCCACCGGC
TACTACTTCGGGGCCTCCGCCGCGACCGCGACCTGTCTGACAATCATGACATCATCTCCATGAAGCTGTTCCAG
CTGATGGTGGAGCACACGCCGACGAGGAGAGCAATCGACTGGACCAAGATCGAGCCAGCGTCAACTTCCTCAAG
TCGCCAAAGACACGTTGGACGACCCACGGGGAACCTCCGACGCGGGCCCCTGACGGGTGGCGGGTGTTCCTG
CTGCTGCTGTGCGCTCTCTGGGCATCGTTGTCTGCGCCGTGGTGGGGGCCGTGGTGTTCAGAAGCGGCAGGAG
CGGAACAAGCGCTTCTACTGATGGCGCCTCCGGCGGGGCCCTGTCCCTGGGCCAGGAGCAATGTGAACCTTTT
TTTTTACCGGATTATAAAAGAAACAAGATGACCTTATTCTTAACGTGTTCAAATAAATGATTAAAGTATTT
TCATACATTTTGCTTCTTGCCAGCAGGGACAGGTGECAGAGCCGAGGCTTAGGGTCTGGCACCCCCACAGCTG
GAGACGGAGGCTCTCTGGGGTGGTGTCTCAGGAGCAGGGGTCTGTGTCTACAGATGGGCTGTGGCCCTTGCAG
GCAGCTGTGAACAACCTGAGGGTCCCCCGACACACTGGGTGGGCTCCTGAGGAC

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FIGURE 1831

MAAEGWIWRWGWRRCLEGRPGLLGPGPGPTTLPFLLLLLGSVTADITDGNSEHLKREHSLIKFYQGVGSSSMPLW
DFQGSTMLTSQYVRLTPDERSKEGSIWNHQPCFLKDWEHMHVHFVHGTGKKNLHGDGIALWYTRDLVPGPVFGS
KDNFHGLAIFLDITYPNDETTERRVFPYISVMVNNGSLSYDHSKDGRWTELAGCTADFRNRDHDTF LAVRYSRGRLT
VMTDLEDKNEWKNCIDITGVRLPTGYFFGASAGTGOLSDNHDII SMKLFQLMVEHTPDEESIDWTKIEP SVNFLK
SPKDNVDDPTGNFRSGPLTGWRVFLLLLCALLGIVVCAVVGAVVFQKRQERNKRFY

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FIGURE 1832

GGCACGAGGGCTTGCTCGGGCCGGCACCCCTAGGCCGGCCCGCCGACGTGTCGCCGACATGGAACCCCTTGGCCA
GCAACATCCAGGTCCTGCTGCAGGCGGCCGAGTTCCTGGAGCGCCGTGAGAGAGAGGCCGAGCATGGTTATGCGT
CCCTGTGCCGCATCGAGTCCAGGCCCATCCACAGGAGGAAGAAGCGACCCCCCAGGCTCCTGGCGCGCAGG
ACAGCGGGCGGTGAGTGACAATGAACTGGAGAAGCGCAGGAGGCCAGTTGAAGCGGTGCCCTGGAGCGGCTGA
AGCAGCAGATGCCCTTGGGGGCCGACTGTGCCCGGTACACCACGCTGAGCCTGCTGCCCGGTGCCAGGATGCACA
TCCAGAAGCTGGAGGATCAGGAGCAGCGGGCCGACAGCTCAAGGAGAGGCTGCCGAGCAAGCAGCAGAGCCTGC
AGCGGCAGCTGGAGCAGCTCCGGGGGCTGGCAGGGCGGCCGAGCGGGAGCGGCTGCCGGCGGACAGTCTGGACT
CCTCAGGCCTCTCCTCTGAGCGCTCAGACTCAGACCAAGAGGAGCTGGAGGTGGATGTGGAGAGCCTGGTGTG
GGGGTGAGGCCGAGCTGCTCGGGGGCTTCGTCGCCGGCCAGGAGCACAGCTACTCGCACGGCGGCCGCGCCTGGC
TATGATGTTCTCACCAGGGCGGGCCTTGCCCTCTACTCGTGCCAGGCCCACTTGCCAGGCAGGAGCCCTCCC
CAAGCCTCAGGGCTGCTCGGAGTCACCTGTTGGAATGGACTAAAGGACCTTGTTGGGAACAGGTGCTCCCC
AAACACCCCTGCTGCTGGCTGCCAGGCAGGCCCTCTGGAAGGGAAGGGGACAGGACTCATCAGGACCTCCCTGGACC
CCTGCAGGGCAGGCAGCTTGGGCCCGAGCCCAAGCATTGGCTCTGCTGCCCCCAAGGGGACAGGAAGCCTCTTG
GGCCTCTTCCCTTCTGGACAAGGCCCTGCCTTTGCCTCACATAAACTGTACAGTATTTTCATTAAAGCCTC
TTTCATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1833

MEPLASNIQVLLQAAEFLERREREAEHGYASLCPHRSPGPIHRRKKRPPQAFGAQDSGRSVHNELEKRRRAQLKR
CLERLKQQMPLGADCARYTTLSLLRRARMHIQKLEDEQEQRARQLKERLRSKQSLQRQLEQLRGLAGAAERERLR
ADSLDSSGLSSERSDSQEELEVDVESLVFGGEAELLRGFVAGQEHSYSHGGGAWL

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FIGURE 1834

CAACTCATGGCGCGCGCGCGCGCGCGCGCGAGCTGCTTGGGCGCGGTGCGGTGGTACTGAGCTACGAGCCTGGCG
 GCGGGTGTGCGCCGAGCCCCGCGCGCGCGCGCGCTCGCGTGCCCTCCAGGCTCCGACCCCCIGATGCTGCGCGG
 GTGCTGAGCCCGCTTCGGCCGGGACATGGTGAAGTATTTCTGGGCGAGCGTGCTCCGGAGTTCTGGGACC
 AAGTGTTCCGCCCTTCTGGCAGCGGTACCGAATCCCTATAGCAAACATGTCTTGACGGGAAGACATAGTACACC
 GGGAGGTGACCCCTGACCAGAACTGCTGTCCC GGCGACTCCTGACCAAGACCAACAGGATGCCAGCTGGGCGG
 AGCGACTATTTCTGCCAATGTTGCTCACTCGGTGTACGTCTGGAGGACTCTATTGTGACCCACAGAAATCAGA
 CCATGACTACCTTCACTTGAACATCAACCACGCCCGGCTGATGGTGGTGGAGGAACGATGTGTTTACTGTGTGA
 ACTCTGACAACAGTGGCTGGACTGAAATCCGCCGGGAAGCCTGGGTCTCCTCTAGCTTATTGGTGTCTCCAGAG
 CTGTCCAGGAATTTGGTCTTGCCCGGTTCAAAAGCAACGTGACCAAGACTATGAAGGGTTTTGAATATATCTTGG
 CTAAGCTGCAAGGCGAGGCCCTTCCAAAACACTTGTGAGACAGCCAAGGAAGCCAAGGAGAAGGCAAGGAGA
 CGGCACCTGGCAGCTACAGAGAAGGCCAAGGACCTCGCCAGCAAGCGCGGCCACCAAGAAGCAGCAGCAGCAGCAAC
 AGTTTGTGTAGCCAGTCTACCACCACACAGCACCCAGACAGCTAGGCTTAGCCCCCTCTGCCCTCCCTTCATTG
 TACTTTATCATTAAAAATCAACTCCAGCCCTGTCTGCTGTCTACGTGGTGGGTGTGGGGATGCAGTTTGGCAT
 CTGCAGTACACCAAGCACATGATTCTGTCTGAGCCAGGTCTGCTTATTCTCCCATTTGGGCAGCTGAGGACCGAG
 GCACAGAGGTGCGGTGACTTGCCCGGGGCTCCAGGTAGCCTGCAGGTTAACTGGCGGTAAAGTGTAGACTGTAAG
 CCCGACAAGGCGAGGCTTTTGTTTTGTTCTCTGATGTGTCTCAGTATCTAGCACATAATAGACACTCAATAAA
 TACTTGTGAATCAAA

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FIGURE 1835

MVKYFLGQSVLRSSWDQVFAAFWQRYPNPYSKHVLTEDIVHREVTDPQKLLSRLLTKTNRMFPRWAERLFPANVA
 HSVYVLEDSIVDPQNQIMTIFTWNNINHARLMVVEERCVCVNSDMSGWTEIRREAWVSSSLFGVSRVQEFGLAR
 FKSNTKTMKGFYILAKLQGEAPSKTLVETAKEAKEKAKETALAATEKAKDLASKAATKKQQQQQFV

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FIGURE 1836

CCGAGGAGCGCTCGGGCTGTCTGCGGACCCTGCCGCGTGACGGGGTGC GGCGCGCTGGAGCTGGGAGTGAGGCG
GCGGAGGAGCGAGGTGAGGAGGAGCCAGGAAGGCAGTTGGTGGGAAGTCCAGCTTGGGTCCCTGAGAGCTGTGAG
AAGGAGATGCGCGCTGCTCTGTGGCCCTGTGGGGTCTGTGAGTGTGCTTGGGCTCCAGTCTTGTCCCTGGAG
GCCTCTGAGGAAGTGGAGCTTGAGCCCTGCCTGGCTCCAGCCTGGAGCAGCAAGAGCAGGAGCTGACAGTAGCC
CTTGGGCAGCCTGTGCGGCTGTGCTGTGGCGGGCTGAGCGTGGTGGCCACTGGTACAAGGAGGGCAGTCGCCTG
GCACCTGTGCTGGCCTGTACGGGGCTGGAGGGGCCGCTAGAGATTGCCAGCTTCCCTACCTGAGGATGCTGGCCGC
TACCTCTGCCCTGGCAGAGGCTCCATGATCGTCTCGAGAATCTCACCTTGATTACAGGTGACTCCTTGACCTCC
AGCAACGATGATGAGGACCCCAAGTCCCATAGGGAACCTCTCGAATAGGCACAGTTACCCCGACAGCACCCCTAC
TGGACACACCCCGCAGCGATGGAGAAGAACTGCATGCAGTACCTGCGGGGAACACCGTCAAGTTCCGCTGTCCA
GCTGCAGGCACCCCGCAGCCACCATCCGCTGGCTTAAGGATGGACAGGCCTTTATGGGGAGAACCAGCATTGA
GGCATTTGGCTGGCCATCAGCACTGGAGTCTCGTGATGGAGAGCGTGGTGCCCTCGGACCCGCGGCACATACACC
TGCTCTGGTAGAGAACGCTGTGGGCAGCATCCGCTATAACTACCTGTAGATGTGCTGGAGCGGTCCCGCACCGG
CCCATCTGTCAGGCGGGGCTCCCGGCCAACACACAGCCGCTGGTGGGCAGCGACGTGGAGCTGCTGTGCAAGGTG
TACAGCGATGCCAGCCACATCCAGTGGCTGAAGCACATCGTCATCAACGGCAGCAGCTTCGGAGCCGACGGT
TTCCCTCTATGTGCAAGTCTTAAGAGCTGCAGACATCAATAGCTCAGAGGTGGAGGTCTCTGTACTGCGGAACGTG
TCAGCCGAGGACGCGAGCGAGTACACTGCCTGCGAGGCAATTCCATCGGCTCTCTCTACCACTGTGCTGGCTG
ACGGTGTCTGCCAGAGGAGGAGCCACATGGACCGCAGCAGCGCCCGAGGCCAGGTATACGGACATCATCTCTGTAC
GCGTGGGCTCCCTGGCCTTGGCTGTGCTCTGTCTGCTGGCGGGCTGTATCGAGGGCAGCGCTCCACGGCCGG
CACCCCGCCCGCCCGCCACTGTGCAGAACTCTCCGCTTCCCTCTGGCCGACAGTTCTCCTCTGGAGTCAGGC
TCTTCCGGCAAGTCAAGCTCATCCTTGGTACGAGGCGTGCCTCTCTCTCCAGCGGCCCGCCCTGTCTCGCCGGC
CTCGTAGGCTAGACTACCTCTGACCCCACTATGGAGTTCCCGGGCAGCGTGGTCTTGGGAAGCCCTTA
GGCAGGGCTGCTTTGGCCAGGTATACGTGCAGAGGCTTTGGCATGGAACCTGCCCGCCTGACCAAGCCAGC
ACTGTGGCCGTCAAGATGCTCAAGACAACGCTCTGACAAGGACCTGGCCGACCTGGTCTCGGAGATGGAGGTG
ATGAAGCTGATCGGCCGACACAAGAACATCATCAACTGCTTGGTGTCTGCACCCAGGAAGGGCCCTGTACTGTG
ATCGTAGGAGTCGCGCCGCAAGGGAACCTGCGGGAGTTCTTGGCGCCCGGCGCCCGCCAGGCCCGACCTCAGC
CCCGACGGTCTCGGAGCAGTAGGGGGCGCTCTCCTTCCAGTCTTGGTCTCTGCGCCTACCAAGTGGCCGGA
GGCATGCAGTATCTGGAGTCCCGGAAGTGATTCACCGGGAACCTGGCTGCCCGCAATGTGCTGGTGAATGAGGAC
AATGTGATGAAGATTGCTGACTTTGGGCTGGCCCGCGCGCTCCACCAATTGACTACTATAAGAAAACAGCAAC
GGCCGCTGCTGTGAAGTGATGGCGCCCGAGGCTTGTGTTGACCGGGTGATACACACCAAGAGTGAAGTGTGG
TCTTTTGGGATCTGCTATGGAGATCTTCACTCTCGGGGCTCCCGTATCTTGGCATCCCGGTGGAGGAGCTG
TTCTGCTGTGTCGGGAGGGACATCGGATGGACCGACCCCACTGCCCCCAGAGCTGTGAGGCGCTGGACAAGTCTCTGCTG
GAGTGTGGACACGACGCGCTCCAGAGGCTTACCTTCAAGCAGCTGGTGGAGGCGCTGGACAAGTCTCTGCTGCTG
CGCGTCTGAGGAGTACCTGCAGCTCGGCTGACCTTCGGAGCTATTCCCGCTTGGTGGGAGCGCCAGCAGC
ACCTGCTCTCAGCGATTCTGTCTTCAGCCACAGCCCTGCCATTGGGATGGGATGCTGCTGCTGCTGCTGCTGCTG
GGGGTGAGACATGGAAGAGCTCAAGGCTGTGACGGCACATAGGCTGTGGCCTTGGGCTTGGGGCTCAGGCA
CAGCTGACACAGTGTGCACTTGATGATGAGGGGCCCTGGCCAGAGTTGCTGTGCGGTGCAAGGGCGCT
GCCCTTGCCTTGGAGTGGCTGTGCTGTGCTGATGGGCCCAAGTTCAGGGTCTGCTGCTGCTTCTGGACCA
TGGCGCTTAGTCCCAATCCCGGTTTGGCTGAGCTGGCTGGAGAGCTGCTATGCTAACTCTGCTCCCAAT
ACCAGCAGGAGGTTCTGGCGCTTGAACCCCTTCCCAACCTCCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGA
CGGGAGCATTGGCCCTGAGCCAGAGAAGCTGGAAGCCTGCCGAAAACAGGAGCAATGGCGTTTTATAAATA
TTTTTTTTGAATAAA

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FIGURE 1837

MRLLLLALLGVLLSVPGPPVLSLEASEEVELEPCLAPSLEQQEQELTVALGQPVRLCCGRAERGGHWHYKEGSRLAP
AGRVRCWGRGLEIASFLPEDAGRYLCLARGSMIVLQNLTLITGDSLTSSNDDEDPKSHRDLNHRHSYPQQAPYWT
HPORMEKKLHAVPAGNTVKFRCPAAGNPTPTIRWLKDGQAFHGENRIGGIRLRHQHWSLVMESVVPDRGTYTCL
VENAVGSIRYNYLLDVLERSPHRPILQAGLPANTTAVVGSDEVLLCKVYSDAQPHIQWLKHIVINGSSFGADGFP
YVQVLKTADINSSEVEVLYLRNVSAEDAGEYTCLAGNSIGLSYQSAWLTVLPEEDPTWTAAPPEARYPDIIILYAS
GSLALAVLLLLAGLYRGQALHGRHPRPPATVQKLSRFPPLARQFSLESGSSGSSSSSLVRGVRSSSGPALLAGLV
SLDLPLDPLWEFFPRDLVLGKPLGEGCFGQVVRAEAFGMDPARPDQASTVAVKMLKDNASDKDLADLVSEMEVMK
LIGRHKNINLLGVCTQEGPLYVIVECAAKGNLREFLRARRPPGPDLSPDGPRSSEGPLSFPLVLCAYQVARGM
QYLESRKCIHRDLAARNVLVTEDNVMKIADFGLARGVHHIDYYKKTSNGRLPVKWMAPALPDVRYTHQSDVMSF
GILLWEIFTLGGSPYPGIPVEELFSLREGHRMDRPHCPPELYGLMRECWHAAAPSQRPTFKQLVEALDKVLLAV
SEEDLRLTTFGYPSPSGGDASSTCSSSDSVFSDPLPLGSSSPFPGSGVQT

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FIGURE 1838

CCGAGGAGCGCTCGGGCTGTCTGCGGACCCTGCCGCGTGACGGGGTCCGCGCCGGCTGGAGCTGGGAGTGAGGCG
GCGGAGGAGCGAGGTGAGGAGGAGCCAGGAAGGCAGTTGGTGGGAAGTCCAGCTTGGGTCCCTGAGAGCTGTGAG
AAGGAGATCGGGCTGCTGCTGGCCCTGTTGGGGTCTCTGCTGAGTGTGCTTGGCCCTCCAGTCTTGTCCCTGGAG
GCCTCTGAGGAAGTGGACCTTGAGCCCTGCCCTGGCTCCAGCCTGGAGCAGCAAGAGCAGGAGCTGACAGTAGGCC
CTTGGGCGAGCTGTGCGGCTGTGCTGTGGGCGGGCTGAGCGTGGTGCCACTGGGTACAAGGAGGGCAGCTCGCCTG
GCACCTGCTGGCCGTGTACGGGGCTGGAGGGGCCCTAGAGATTGCCAGCTTCTACCTGAGGATGCTGGCCGC
TACCTCTGCCTGGCAGAGGCTCCATGATCGTCTCGCAATCTCACCTTGATTACAGGTGACTCCTTGACCTCC
AGCAACGATGATGAGGACCCCAAGTCCCATAGGGACCTCTCGAATAGGCACAGTTACCCCCAGCAAGCACCTTAC
TGGACACACCCCCAGCGCATGGAGAAGAAGTGCATGCAGTACCTGCGGGGAACACCGTCAAGTTCCGCTGTCCA
GCTGCAAGCAACCCACGCCACCATCCGCTGGCTTAAGGATGGACAGGCCCTTTCATGGGAGAACCGCATTTGA
GGCATTGCGCTGCGCCATCAGCACTGGAGTCTCGTATGGAGAGCGTGGTGCCCTCGGACCGCGGCACATACACC
TGCTTGGTAGAAGACGCTGTGGGCGCATCCGCTATAACTACCTGTGATGCTGGAGCGGTCCCCGACCCGG
CCCATCTGCGAGGCGGGCTCCCGGCCAACACCAAGCCGTGGTGGGCGACGACGTGGAGCTGCTGTGCAAGGTG
TACAGCGATGCCACGCCACATCCAGTGGCTGAAGCACATCGTCATCAACGGCAGCAGCTTCGGAGCCGACGGT
TTCCCTTATGTGCAAGTCTTAAAGACTGCAGACATCAATAGCTCAGAGGTGGAGGTCTGTACCTGCGGAACGTG
TCAGCCGAGGACGCGAGCGAGTACACTGCTCGCAGGCAATTCATCGGCCCTCTCCTACCAGTGTGCTTGGCTC
ACGGTGCTGCCAGGTACTGGGCGCATCCCCACCTCACATGTGACAGCCTGACTCCAGCAGGCAAGAACAGTCT
CCCACCTTTCAGTTCTCCTGGAGTCAGGCTCTTCCGGCAAGTCAAGTCTATCCTGGTACGAGGCGTGCGTCTC
TCTCCAGCGGCCCGGCTTGTCTGCGCGGCTCTGTGAGTCTAGATCTACCTCTCGACCCACTATGGGAGTTCCCC
CGGGCAGGCTGTGTCTTGGGAAGCCCTTAGCGAGGGCTGCTTTGGCCAGGTAGTACGTGCAGAGGCGTTTGGC
ATGGACCTCGCCGCGCTGACCAAGCCAGCACTGTGGCCGTCAAGATGCTCAAAGACAACGCCCTTGACAAGGAC
CTGGCCGACCTGGTCTCGGAGATGGAGGTGATGAAGTGTATCGGCCGACACAAGAACATCATCAACCTGCTTGGT
GTCTGCACCCAGGAAGGGCCCTGTACGTGATCTGGAGTGCGCCGCCAAGGGAAACCTCGGGGAGTTCTCTCGCG
GCCCGGCGCCCGCCAGGCCCGGACCTCAGCCCGCAGCGTCCCGAGCAGTGAAGGGGCGCTCTCTTCCCCAGTC
CTGGTCTCCTGCGCTTACCAGGTGGCCGAGGCGATCGAGTATCTGGAGTCCCAGGAAGTATCCACCGGGACCTG
GCTGCCCGCAATGTCTGGTGACTGAGGACAAATGTATGAAGATTGCTGACTTTGGGCTGGCCCGCGGCTCCAC
CACATTGACTACTATAAGAAAACAGCAACGGCCGCTGCTGTGGAAGTGGATGGCGCCGAGGCGCTTGTTTGAC
CGGGGTGACACACACAGAGTGACGTGTGGTCTTTTGGGATCCTGCTATGGGAGATCTTCAACCTCGGGGCTCC
CCGATATCTGGCATCCCGGTGGAGGCTGTCTCGCTGCTGCGGGAGGGACATCGGATGGACCGACCCCCACAC
TGCCCCCAGAGCTGTACGGGCTGATGCGTGAGTGTGGCACGCAAGCGCCCTCCAGAGGCGCTACCTTCAAGCAC
CTGGTGGAGGCGCTGGACAAGGCTCTGCTGGCCGTCTCTGAGGAGTACCTCGACCTCCGCTGACCTTCGGAGCC
TATTCCCCCTCTGGTGGGAGCGCCAGCAGCACCTGCTCTCCAGCGATTCTGTCTTCAAGCCAGACCCCTTGCCA
TTGGGATCCAGCTCTTCCCTTCGGGTCTGGGGTCGAGACATGAGCAAGGCTCAAGGCTGTGCAGGCACATAGG
CTGGTGGCTTGGGCTTGGGCTCAGCCACAGCCTGACACAGTGTCTGACCTTGTATGATGAGGCGCCCTGGCC
CAGAGTTGCTGTGCGCTGTCCAAGGGCGGTGCCCTTGCCCTTGGAGCTGCGCTGCTGTCTGATGGCCCAA
GTGCAGGGTTCTGCTCGGCTCTTGGACCATGGCGCTTGTGCTCCATCCCGGCTTGGGCTCTGAACCCCTTTCGCCACCT
GCTGCTATGCTAAACCTCTGCTCCCAATACCAAGCAGGAGGCTTGGGCTCTGAACCCCTTTCGCCACCT
CCCCCTGCTGCTGCTGCCCGAGCTCTGACGGGAGCATTGGCCCTGAGCCGACAGAGCTGGAAGCTGCCGA
AAACAGGAGCAATGGCGTTTTATAAATTATTTTTTGAATAAA

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FIGURE 1839

MRLLALLGVLLSVFGPPVLSLEASEEVELEPCLASLEQQEQELTVALGQPVRLLCCGRAERGHHWYKEGSR LAP
AGRVRGWRGRLEIASFLPEDAGRYLCLARGSMIVLQNLTLITGDSLTSNDDDEDPKSHRDLNRRHSYPQQAPYWT
HPQRMKKLHAVPAGNTVKFRCPAAGNP TPTIRWLKDGQAFHGENRIGGIRLRHQHWSLVMESVVPSPDRGTYTCL
VENAVGSI RYNYLLDV LERSPHRPILQAGLPANTTAVVGS DVELLCKVYSDAQPHIQWLKHIVINGSSFGADGFP
YVQVLKTADINSSEVEVLYLRNVS AEDAGEYTCLAGNSIGLSYQSAWLT VLPGTGRIPHILTCDSLTPAGRTKSPT
LQFSLESGSSGKSSSSLVRGVR LSSSGPALLAGLVSLDPLDPLWEFPRDRLVLGKPLGEGCFGQVVRAEAFGMD
PARPDQASTVAVKMLKDNASDKDLADLVSEMEVMKLI GRHKNIINLLGVCTQEGFLYVIVECAAKGNLREFLRAR
RPPGPDLSPDGPRSSGEP LSFPPVLVSCAYQVARGMQYLESRKCIHRDLAARNVLVTEDNVMKIADFGLARGVHHI
DYYKKT SNGRLPVKWM APEALFDRVYTHQSDVWSFGILLWEIFTLGGSPYPGIPVEELFSLREGHRMDRPPHCP
PELYGLMRECVHAAPSQRPTFKQLVEALDKVLLAVSEEYDLRLTFGPYSPSGGDASSTCSSSDSVFSDHPLPLG
SSSFPGSGVQT

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FIGURE 1840

GGCACCGCGGGGACGGAGCTTGGCTGTTGGTCGGTGGGTTCCTGTCGGCGGGCCAAAGGAGGAGACACA
GTTGGAGCAGCTCCGIGGGCTGACTGGGGCAGGGCCTCAGCAGCGCGAGCTTGAGTCGGCCGAGCCTGCGGCGC
CTTCCCTGCGGGTGGGGACGAGCGGGCCCCGCGCGTCATCGCGCGCGAGGAGCCGCGCCTCGGCCCTAGCA
TGTCGGAAAGCGGGCGAGGACAGCCCATGGAGACGACGGCGCCACCCGAGAACGGACATGAGGCCGTCCCGAAG
GCGAGTCGCGCGCGGGGCTGGCACGGGCGCGCGCGGGGGCTGGAGGCGGACCGCGGGCCCCGAGCGGGA
ATCAGAACGCGCCGAGGGCGCCAGATCAACGCCAGCAAGAACGAGGAGGACGCGGGAAAAATGTTCGTTGGTG
GCCTGAGCTGGGATACTAGCAAAAAAGATTAAAAGACTATTTTACTAAATTTGGAGAGGTCGTTGACTGTACAA
TAAAAATGGATCCCAACTGGACGGTCAAGAGGGTTTGGGTTTATCCTGTTCAAAGATGCAGCCAGTGTGGAGA
AGGTCCTAGACCAGAAAGGACACAGGCTGGATGGCCGTGTCATTGACCTAAAAAGGCCATGGCTATGAAGAAGG
ACCCGCTGAAGAAAATCTTTCGTTGGGGTCTGAATCCTGAAGCCACTGAGGAAAAGATCAGGAGTACTTTGGCG
AGTTTGGGAGATTGAGGCCATTGAATTGCCAATGGATCCAAAGTTGAACAAAAGACGAGGTTTGTGTTTATCA
CCTTTAAAGAAGAAGAACCCGTGAAGAAGGTTCTGGAGAAAAAGTTCCTACTGTGAGTGAAGCAAGTGTGAGA
TCAAGGTGGCCAGCCCAAAGAAGTCTATCAGCAGCAGCAGTATGGCTCTGGGGGCCGTGGAACCCGCAACCGAG
GGAACCGAGGCAGCGGAGGTGGTGGTGGAGGTGAGGTCAGGGTAGTACAACTACGGCAAGACCCAGCGACGTG
GTGGCCATCAGAATAACTACAAGCCATACTGAGGCGGCAGCAGGAGCGACCAACTGATCGCACACATGCTTTGTT
TGGATATGGAGTGAACACAATTATGTACCAAATTTAACTTGGCAAACTTTCTATTGCCTGTCCCATGTGCATCTT
ATTTAAATTTCCCCATGGAATCACTCTCCTGTTGACTATTTCCAGAGCTCTAGGTGTTTAGGCAGCGTGTG
TGCTGAGAGGCCATAGCGCCATCATGGGCTGATTTTTATTACCAAGTCCCCAGAAAGCAGGTGGGAGGCTCTGC
TTCTGCTGCCGCTCTGCAGCCTGGACCTGTGGACCTGGTTGTAAGAGTAAATTTGATCTTAGGAAACCAGTG
TCACCTTTTTTACCTTTTAAATTTATATTATTGCGTCATACATTTCTGTAAACGGAAGTGTAAATTTTACTG
TACTTTTTGGTACCTTTGGGAATCTAATGTATTGTAAAGGTATTTACACGTGTCTGATTTTGGCACAACTGG
ATATTGAAGCTATCCAAGCTTTTGAATAAAATTTAAAAACCCCCAAGCCTGGGTGAGTGTGGG

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FIGURE 1841

GGCACCGCGCGGACGGAGCTTGGCTGTTGGTCGGTGGGTTCCCGTGCGGCGGCGGCCAAGGAGGAGGACACA
GTTGGAGCAGCTCCGTGGGCTGACTGGGGCGAGGCCCTCAGCAGCGCAGCTTGAGTCCGGCCGAGCCTGCGGCGC
CTTCCCTTCCGGGTGGGGACGAGCCGGGCCCGCGCGCTCATCGGCGGCGAGGAGCCCGCGCCCTCGGCCCTAGCA
TGTGCGAAGCGGCGGAGGAGCAGCCCATGGAGACGAGCGCGCCACCGAGAACGGACATGAGGCCCTCCCGAAG
GCGAGTCGCGCGCGGGGCTGGCAGGGCGCCGCGCGGGGGCTGGAGGCGCGACCGCGCGCCCGGAGCGGGG
ATCAGAACCGCGCGGAGGCGACCCAGATCAACGCCAGCAAGAACGAGGAGGACGCGGGAATAATGTTTCGTTGGTG
GCCTGAGCTGGGATACTAGCAAAAAGATTAAAGACTATTTTACTAAATTGGAGAGGTCGTGACTGTACAA
TAAAAATGGATCCCAACACTGGACGGTCAAGAGGGTTTGGGTTTATCCTGTTCAAAGATGCAGCCAGTGTGGAGA
AGGTCTAGACCAGAAGGAGCACAGGCTGGATGGCCGTGTCATTGACCTTAAAAAGGCCATGGCTATGAAGAAGG
ACCCGGTGAAGAAAATCTTCGTTGGGGGCTGAATCCTGAAGCCACTGAGGAAAAGATCAGGGAGTACTTTGGCG
AGTTTGGGGAGATTGAGGCCATTGAATTGCCAATGGATCCAAAGTTGAACAAAAGACGAGGTTTGTGTTTATCA
CCTTTAAAGAAGAAGAACCCGTGAAGAAGTTCTGGAGAAAAAGTTCCATACGTGTCAGTGAAGCCAGTGTGAGA
TCAAGGTGGCCAGCCCAAGAAAGTCTATCAGCAGCAGCAGTATGGCTCTGGGGCCGTGGAACCCGACCCGAG
GGAACCGAGGCGAGGAGGTGGTGGTGGAGGTGAGGTCAGGGTAGTACAACTACGGCAAGAGCCAGCGACGTG
GTGGCCATCAGAATAACTACAAGCCATACTGAGGCGGCGAGCAGGAGCGCAACTGATCGCACACATGCTTTGTT
TGGATATGGAGTGAACACAATTATGTACCAAAATTTAACTTGGCAAATTTCTATTGCTGTCCCATGTGCATCTT
ATTTAAAAATTTCCCCATGGAAATCACTCTCCTGTTGACTATTTCCAGAGCTCTAGGTGTTTAGGCAGCGTGTGG
TGCTGAGAGGCCATAGCGCCATCATGGGCTGATTTTATTACCAGGTCCCCAGAACGAGGTGGGAGGCTCTGC
TTCCTGCTGCCGCTCTGCAGCCTGGACCTGTGGACCTTGGTTGTAAGAGTAATTTGTATCTTAGGAAACCACTG
TCACCTTTTTTCACCTTTTAAATTTTATATTATTGCGTCATACATTTCCGTGAACGGAAGTGTAAATTTTACTG
TACTTTTTGGTACCTTTTGGGAATCTAATGTATTGTAAAGGTAATTTACACGTGTCCTGATTTTGGCACAACTGG
ATATTGAAGCTATCCAAGCTTTTGAAATAAAATTTAAAAACCCCAAGCCTGGGTGAGTGTGGG

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FIGURE 1842

GAAATGCTTACGATGATCATTTAGAGGTTTATTTTGAACAACTGGCAATTCCACGAATGATGGAATAAACATA
TGAAGTAGAAGGACTGGAACCTCCAGAAAAAGTACTTTAAGTTACCTACAGGTGATCCTAGTCAGGTATGAATTG
ATAAGAAATGCCTGCACCTTCCCTCCTTCTTCTTCCCTTGCCCTACAGAAAATTAAGGGCAAAACAATGGAC
ATCTACATATTCTTCATTTCAGATCAACCAGTGGCTAGCATTTGCCACCTTTTGACGTTTCTTCTTTCCATAA
GTACTTTCTTCTCTGAATCATTTGAAAGCAAATGAAAACAGTAGCCTAAAGTGTCAGTTTCAACCAGAAAATAAC
AGCTCTGATTTCTCATGGCTCACACTCTTCTGAAACGACTCGGGTAGAGGCTGAGGAAGGCCGTGTTGTTGCT
ACCTGGGACTAGTGGGATGAGAGACTGAGAAAAGAAATAAGACACGGAGACAAAGTACAGAGAAAGAACAGCGGG
CCCAGGAGACCGGCACTCAGCATACGGAGGACCAGCACTGGCACCGGCCCTGAGTTCCCTCAGTTTATTGATTA
CCATTTTCAGTGCTCAGCAAGAGGAATGCGGTAGGAGACAGGGTGTCAAGCAAGAAAACCTGTGAGCCTTTCTT
TTCGCTGCTGCGGCCGACGCCATGAGCATGCTCGGGCCTCAGAAGAGGCTCGCCTCTAGTGCTCTCGCTGTGGC
AAGAAAGAGGTCTGGTTAGACCCCACTGAGACCAATGAAATCGCCAAATGCCAACTCCCGTCAGCAGATCCGGAAG
CTCATCAAAGACGGGCTGATCATCCGCAAGCCTGTGACGCTCCATTCCCGGGCTCGATGCCGGAAGAACCTTG
GCCCCCGGAAGGGCAGGCACGTGGCCATAGGTGAGCAGAAGGTCAGCCAAATGCCGAATGCCAGAGAAGGTC
ACATGGATGAGGAGAATGACGATTTTGCGCCGGCTGCTCAGAAGATACCGTGAATCTAAGAAGATCGATGCCAC
ACGTATCACAGCCTGTACTGAAGGTGAAGGGGAATGTGTCAAAGACAAGCGGATTTCTCATGGAACACATCCAC
AAGCTGAAGGCAGACAAGGCCCGCAAGAAGCTCCTGGCTGACCAAGGCTGAGGCCCGCAGGCTAAGACCAAGGAA
GCAGGCAAGTGCCTGAAGAGCGCCTCCAGGCCAAGAAGGAGGTTTCATCAAGACTTTATCCAAGGAGGAAG
ACCAAGAAATAAAGCTCCCCCTTTGTCTGTACATACTGGCCTCTGTGATTACATAGATCAGCCATGAAAAATAA
ACAAGCCTTAA

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FIGURE 1843

GGCACGAGGCGCCATCCTGGGAAGGGGCCCGGAGTGTGAGAGAGAGACTCCCCACGCCCATCCTGGAAGAGGAG
CCCGGAGTGTGAGCTGAGTGGTCCGAGCTATACCTGTGGACATTGGTTCTCCATTGAAGAGCTGGAGGACCTTT
ACATGGTGTTTAAGGCCAAGCACTGGCTAGCCAGTACTGGGGGTGCAGCCGCACATGGCGCCGCGCTGGGACCC
CCAGCCTGCCCTACCTGGAGCAGTACCGGATTGATGCCAGCCAGTTCGGGGAACCTTTGGCAGCCTGACACCCCT
GGGCCCTGTGGCTCCACACACCTCTGTGGCAGGGGCGCATGTTCAAGCTCCTGGACAAAACAAGGACTCGCTGA
TCAACTTCAAGGAGTTTCGTGACAGGGATGAGCGGGATGTACCAAGGATACCTGACAGAGAAGCTCAAGGTGCTCT
ACAAGCTACACCTTCCCGCAGCTCTGAGCCAGAGGAAGCCGAGTCAAGCCTGGAGCGCGCCCATTTTTCACAG
AGGACAGCTCCTCAGAAGAAGCACTACCACAGGAAGAGCAAGAAGGAAGTGGAACTGAGGAGAGAGGAGAGGAGA
AGGGGACAGCTCTCCGGACTATCGGCCTACCTTCGAATGTGGGCCAAGGAGAAGAGGGCTCAGAAGAGAGACGA
TTAAGGATCTTCCCAAGATGAACAGGAGCAGTTTATTGAGCTGTGCAAGACGCTTTTACAACATGTTTCAAGTGAAG
ACCCATGGAGCAGGACCTGTACCAAGCCTATCGCCAGCTGGCCAGCTTCTGCTCCGCATCGGAGAGGTGGGGA
AGAAGTTCTCAGCCCGCACAGGCAGGAAGCCAGGGACTGTGCCACTGAGGAGGACGAGCCACCAAGCACCAGAAC
TGATCAGGACGCGAGCCAGGAGCTTACGCCCCAGCTGACAGGAGACCCCAAGCCAAAGCAGGCGGAGACACAC
ACCTCGGAACAGCCCCACAGGAGAGCCAGTGGTGGTGGAGGGGGGAGCGGCGAGGGACAGGGCTACCCCTCCC
AGCTGCTGTCTGACGATGAACCAAGAGCAGATGTCCATGTCTCTACTCGGTGGTCAGCAGGGGCTCCCTGC
AATGTGAAGACCTTGCAGACGACACGGTGTGCTGGGCGGGGAGGCGCTGCAGCCCAAGCAGCGCATCGCGGGCA
CCGTGACACCCGACTGGTGATCTCCTTTGAGCAGATCCTGGCCTCCATCTGACGAGTCCGTGTGGTGAAT
TCTTTGAGAAGAGAGTGGACATTGGACTCAAGATCAAGGACCAAAAGAAAGTGGAGAGACAGTTCACGACCCGCA
GTGACCATGAGCAGCCTGGAGTTTCCGGCTGATGCTGAGGCTTGAGGCTTGAGGCTTGAGGCTTGAGGCTTGAGGCT
CTGGCCTCATCTCCTCCTGCTTTCTCCTTATCAGTTTCTCTTAAAGGTGTGCCCTCCTGCTCTCCAGGA
GCAGTGAGTTGTGAGTGAAGAAGAGGCTGGTGAGCCAGCTGCTTACAGAGATTCCCTGGGCGTGCATCTCC
TGGCGCCGGCTGCTTCTGGGCCCCAGGAAGAGGCTGTGGCTCCCACCTTCTTACACCTGGTGGGAGCCGCGCTG
CACACAGCTGCACCTGCCTAGCATTAGAGGCTCTCAGATCTGCCCTTGCTTGCTCATACCTCTGTGCTCCACAT
CGCGCCAGGCGCAGTGAATCCCTCCTCCTGGATGCTTTCTGCAAGTATGTGGTATGGGGGCTATTCTCGCT
CTTGSCACCAAGGTGGGGGCGATGTGCTGTGGGCGCCAAAGTGAAGAACCTCAGGTGCTCTCCGGGAGCCT
GAACCTCTGACTGAGGAACATGGGCAGAACATGTTTATTGACAGAGTGGGCGCTGCGCACAGGCGGTGGCTGA
CACGTGCTCTCAGCTCATATCCTTTCCAGTAACTTTAAAAAACAATCCCTCAGGTCTGATATATTCTCTGGA
TTCATTTCACTGGCTAGAAATTAACATGTGCTCAATGCCTTAATAAATCCCTGAAGAAATAAAACCACCTGTG
TGCAATGCGCTTGCTGTGGCCCCAACCACTGCTTAGGCTCCCACTCTCCCCAGGCCAAGTATGGGGGCTGG
CTGTGTTCTGGAAGTTCAAGACACTTAGTCTCCACAGTGGGTGGAAGAGTGCAGGCTGCGCAGGTGAGTGA
GAGCGAGAACCTGCTGGTGCAAGCTGGGCAGGTCCTGACCACTGCATCAGGGGATGCCCTGAGCTCCACAGGT
CTTCTATGGGCGAGGGGTTGGGGTCTGGTGAAGGAAGTGCATCCTCAGGCTGGGCTGTAGCAGCTGTCTGCC
TTGGGTTCAAGAACCAAGCTGTGGAGCCAAAGTGACCGCAGGGGGCCCCAGGCTGGAGCCACAAGGATACCT
CACTTTGATAGGAGCTGAACCTGACCAAGTGTCCAGTGTAGCCCTAGGCCACACATGCGGCTGCTTGGCTTCTAT
AAGATACAGCAGTTACCCCCCTTATCCACAGGGGATACAGTGGATATCTAAACACCAAGCCCAAGTGGATGTCTAA
AACCACAGATAATAACAAACCTTATACATACTGTTTTTCTATGTCATACATCTGTGATTAAAGTTTATGAATT
AGGCACCTTAAGAGATTGACAACAATAACTAATAATAAATGTAACGGTTTATCTGTAAAAAATAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA

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FIGURE 1844

MAGRDRPSPLEYLEQYRIDASQFRELFASLTPWACGSHTPLLAGRMFRLLDENKDSLINFKEFVTGMSGMYHGYLE
EKLKVLVYKLHLPALSPEEAESALEAAHYFTEDSSSEELPQEEQEGSGSEERGEKEGTSSPDYRHYLRMWAKEK
EAQKETIKDLPKMNQEQFIELCKTLYNMFSEDPMEQDLYHAIATVASLLLRIGEVGKKFSARIGRKPRDCATEED
EPPAPELHQDAARELQPPAAGDPQAKAGGDTHLGTAPQESQVVVEGGSGEGQGPSQLLSDDET KDDMSMSYSV
VSTGSLQCEDLADDTVLVGGEACSP TARIGGTVDTDWCISFEQILASILTESVLVNFPEKRVDIGLKI KDKKVE
RQFSTASDHEQPGVSG

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FIGURE 1845

GC GCGGCGGCTGCGACCGGGACGGCCCGTTTCCGCCAGCTCGCCGCTCGCTATGGCGTCGCTCACCGTGAAGGC
CTACCTTCTGGGCAAGGAGGACGCGGCGCGGAGATTGCGCCGCTTCAGCTTCTGCTGCAGCCCCGAGCCTGAGGC
GGAAGCCGAGGCTCGCGCGGGTCCGGGACCTGCGAGCGGCTGCTGAGCCGGGTGGCCGCCCTTTCCCCGCGCT
GCGGCTCGCGGCTTCCAGGCGCACTACCGGATGAGGACGGGGACTTGGTTGCCCTTTCCAGTGACGAGGAATT
GACAAATGGCCATGTCCTACGTGAAGGATGACATCTCCGAATCTACATTAAAGAGAAAAAGAGTGCCGCGGGGA
CCACCGCCACCGTGTGCTCAGGAGGCGCCCGCAACATGGTGACCCCCAATGTGATCTGCGATGGCTGCAATGG
GCTGTGGTAGGAACCCGCTACAAGTGACGCGTCTGCCAGACTACGACTTGTGTAGCGTCTGCGAGGGAAGGG
CTTGACCGGGGACACCAAGCTCGCATTTCCCGAGCCCTTCGGGCACCTGTCTGAGGGCTTCTGCGACAGCCG
CTGGCTCCGGAAGGTGAAACACGGACACTTCGGGTGGCCAGGATGGGAAATGGGTCCACAGGAAACTGGAGCCC
ACGTCCTCTCTGTCAGGGGAGGCCCGCCCTGGCCCCACGGCAGAATCAGCTTCTGGTCCATCGGAGGATCCGAG
TGTGAATTTCTGAAGAAGTTGGGGAGAGTGTGGCAGCTGCCCTTAGCCCTCTGGGCATTGAAGTGTATATCGA
TGTGGAGCAGGAGGGAAGAAAGCCGCTGACCCCGCTCTCTCCAGAGAGTTCAGCAGAGAGGAGAAGAGCAG
CTCACAGCCAAGCAGCTGCTGCTCTGACCCAGCAAGCGGGTGGGAATGTTGAGGGGCCACGCAGTCTCTGGC
GGAGCAGATGAGGAAGATCGCCTTGGAGTCCGAGGGGCGCCCTGAGGAACAGATGGAGTCCGATAACTGTTTCAGG
AGGAGATGATGACTGGACCCATCTGTCTTCAAAGAAGTGGACCCGCTCTACAGGTGAATCCAGTCCCTACAGAT
GCCAGATCCGAAGGGCCAAAGCTCTCTGGACCCCTCCAGGAGGGACCCAGGGGCTGAAGGAAGCTGCCCTGTGA
CCCACATCTCCCGCAGAGGCTGACCCGCGGCTGATTGAGTCCCTCTCCAGATGCTGTCCATGGGCTTCTCTGA
TGAAGCGGCTGGCTCACCAGGCTCCTGCAGACCAAGAACTATGACATCGGAGCGGCTTGAGACCAATCCAGTA
TTCAAAGCATCCCCGCGGTTGTGACCACTTTTGCCCACTTCTTCTGCGTGCCCTTCTCTGTCTCATAGTTGTG
TTAAGCTTGCGTAGAATTGCAGGTCTCTGTACGGGCCAGTTTCTCTGCCTTCTCCAGGATCAGGGGTAGGGTG
GGGTGCCCTGGCTCCTTGACGACGGGCTGGGCTGCGAGACCAAGGCTCACTGCAGCGCGCTCTGACCCCTCC
CTGCAGGGGCTACGTTAGCAGCCAGCACATAGCTTGCCATAATGGCTTTCATTTCTCTTTTGTATTAAGTACT
CATAGGTCCCTGACATTTAGTTGATTATTTTCTGCTACAGACCTGGTACACTCTGATTTAGATAAAGTAAAGCCT
AGGTGTTGTGACAGGCGAGGCTGGGGAGGCCAGTGTGTGGGCTTCTGCTGGGACTGAGAAGGCTCACGAAGGG
CATCCGAATGTTGGTTTCACTGAGAGCTGCCCTCTGGTCTCTTCACTGCTAGTTCTCTCATTTCCAAACCAT
CAGCTGCTTTTAAATAAGATCTCTTTGTAGCCATCTGTTAAATTTGTAACAACTCTAATTAATGGCATCAGC
ACTTTAACCAAT

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FIGURE 1846

TGCAGCCTCGGCCCCGCGGGCGCCCCGCGCACCCGAGGAGATGAGGCTCCGCAATGGCACCTTCTGACGCTG
CTGCTCTTCTGCTGTGCGCTTCTCTCGCTGTCCTGGTACGCGGCACTCAGCGGCCAGAAAGGCGACGTTGTG
GACGTTTACCAGCGGGAGTTCTTGGCGCTGCGCGATCGGTTGCACGCACTGAGCAGGAGAGCCTCAAGCGCTCC
AAGGAGCTCAACCTGCTGCTGGACGAGATCAAGAGGGCCGTGTCAAAAGGCAGGCGCTGCGAGACGGAGACGGC
AATCGCACTTGGGCGCGCTAACAGAGGACCCCCGATTGAAGCCGTGGAACGGCTCACACCGGACGTGCTGCAC
CTGCCCCACCGTCTTCCATCACTTCCACACCTGTGGCCAAAGGAGAGCAGTCTGACGCCGCGGTGCGCGTGGGC
CAGGGCGGCACCGGAGTGTGCGTGGTGTATGGGCATCCCGAGCGTGCAGCGCGAGGTGACACTCTGACTGACTGAC
ACTCTGCACTCGCTCATCTCCGAGCTGAGCCCGCAGGAGAAGGAGGACTCGGTATCTGTTGCTGATCGCCGAG
ACTGACTCACAGTACACTTCGGCAGTGACAGAGAACATCAAGGCCCTTGTTCGCCACGGAGATCCATTCTGGGCTC
CTGGAGGTCACTCACCTTCCCCCACTTCTACCTGACTTCTCCCGCTCCGAGAGTCTTTGGGGACCCCAAG
GAGAGAGTCAGGTGGAGGACCAACAGAACCTCGATTACTGCTTCCCTCATGATGTACGCGCAGTCCAAAGGCATC
TACTACGTGCAGCTGGAGGATGACATCGTGGCCAGCCCAACTACCTGAGCACCATGAAGAACCTTTGCACTGCAAG
CAGCCTTCAGAGGACTGGATGATCTTGGAGTTCTCCAGCTGGGCTTCAATGGTAAGATGTTCAAGTCGCTGGAC
CTGAGCCTGATTGTAGAGTTCATTCTCATGTTCTACCGGACAAAGCCCATCGACTGGCTCCTGGACCATATTCTG
TGGGTGAAAGTCTGCAACCCCGAGAAGGATGCGAAGCACTGTGACCGGCAGAAAGCCAACTGCGGATCCGCTTC
AAACCGTCCCTCTTCCAGCAGTGGGCACTCACTCTCGCTGGCTGGCAAGATCCAGAACTGAAGGACAAAGAC
TTTGAAGACAGGCGCTGCGGAAGGAGCATGTGAACCCGCGACGAGAGGTGAGCACGAGCCTGAAGACATACCA
CACTTCACCTTGGAGAAAGCTACCTGCGCGAGGACTTCTTCTGGGCTTACCCCTGCGCGGGGGACTTCATC
CGCTTCCGCTTCTTCCAACCTCTAAGACTGGAGCGGTTCTTCTCCGCACTGGGAACATCGAGACCCGAGGAGC
AAGCTCTTCAACACGCTGTGGAGGTGCTGCCCTTCGACAACCCCTCAGTCAGACAAGAGGCCCTCGAGAGGGC
CGCACCGCCACCTCCGCTACCTCGGAGCCCCGACGGCTACCTCCAGATCGGCTCTTCTACAAGGAGTGGA
GAGGAGAGGTGGACCCAGCCTTCGCCCTCTGGAAGCACTGCGCTCTCGATCCAGACGGACTCCCTGTGTGG
GTGATTCTGAGCGAGATCTTCTGAAAAGGCGCACTAAGCTGCGGGCTTCTGAGGGTACCCTGTGGCCAGCCCT
GAAGCCACATTTCTGGGGGTGCTGCTACTGCCGTCCCGGAGGGCCAGATACGCCGCCGCCAAAGGGTTCTGC
CTGGCGTCGGGCTTGGGCGGCTGGGGTCCGCCGTGCGCCGAGGCGCCCTAGGAGCTGGTGTGCCGCCGCCCG
CCGGCCCGCGAGGAGGACGCGGCCCCACACTGTGCTGAGGCCGGAACCGTTGCAACCCGGCTGCCCCAG
TCAGGCCGTTTTAGAAGAGCTTTTACTTGGGCGCCCGCGTCTCTGGCGGCAACTGGAATGCATATACTACTT
TATGTGCTGTGTTTTTATCTTGGATACATTGATTTTTTACGTAAGTCCACATATACTTCTATAAGAGCGTG
ACTTGTATAAAGGGTTAATGAAG

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FIGURE 1847

MRLRNGTFLTLLLFCLCAFLSLSWYAALSGQKGDVVDVYQREFLALRDLHAAEQESLKRSKELNLVLDEIKRAV
SERQALRDGDGNRTWGRLTEDPRLKPWNGSHRHVLHLPTVFHHLPHLLAKESLQPAVRVGQGRITGVSVMGIPS
VRREVHSYLTDTLHSLISELSPOEKEDSVIIVLIAETDSQYTSAVTENIKALFPTIEHSGLLEVISPSPHFYPDF
SRLRESFGDPKERVWRWKQNLDYCFLLMYAQSGIYYVQLEDDIVAKPNYLSTMKNFALQQPSSEDMILEFSQL
GF IGKMFKSLDLSLIVEFILMFYRDKPIDWLLDHILWVKVCPNEKDAKHCDRQKANLRIRFKPSLFGHVGHSSSL
AGKIQKLKDKDFGKQALRKEHVNPPAEVSTSLKTYQHFTLEKAYLREDDFFWAFTPAAGDFIRFRFFQPLRLERFF
FRSGNIEHPEDKLFNTSVEVLPFDNPQSDKEALQEGRTATLRYRSPDGYLQIGSFYKGVAEGEVDPAFGPLEAL
RLSIQTDSFVWVILSEIFLKKAD

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FIGURE 1848

TTTTCAGAGACTCGCCTGGCAGAGGCCTGGAGCGTCTGCTGCGTGGACTGTGGGCACCGAGCCACCAGGAGGTT
GTTGATCTCATTCTTGTCTCACTGGTCCCTGCCAGACTTGGTGGTCCCTCTCTACTGTGCGGGCAGCCCCACCTCTGT
GCTGCCCATCCACCTACAGCCCTCATGCTGGGCCAGCTGGAGGTTCTGACAGGGGCCCTGGGGTGGCATG
CGGACCCCTTCAGGGTGCCCCAGGCGCAGCAGGCTTCCAGAGACACAGGCACAGGGCGTTTCAGAGCTAGTCCC
CTCGCTGCTGTTGACTGCTCTTGAGCAGCCCCAGGGCGGGTTTCTCAACCTCATTGTCTACCTGAGCAATGAAG
TGAGGTGGGCTCCTGGAACTGCAGCAGCCACCCCGGGGCCATCGTAGGCTAAGAATCCAGTGCAGGGTGAGC
AACCAGCGACCGCTACAAGGACAGTGAAGAGCTAGCACCAGGACCTTGGGTAGCCACCCGCTGGAGGGAGCGTG
TGCTGCAAAAAGCAAGAGTGGGCTTTGGAGGCCAACGGATGGAGCGGATTCACTGTAGGGCTGTCCAGCCCTTG
CTTAGATCCACCTACCTAGGCTGGAAATCGTATTTCACCTTCAGATGCCTTCTCAGAGGATAAAATAACCCCC
GGTGGGGGAGAGTACTGGAAGAGGGCTAATTCCTCGGTTTCTCCCATGAGCATTAGTGTCACTGTAATTTTA
GAGTGACCCAGCTATGTCACGTGTGGCAGGCACAAGAACAGATGTCAATGAGCTATTGCAGAGGTGGACACCCA
GATGTGTGCGCTGGCACACTGGAGGGGCCCTAGGGTGGCTCTAGACCGCCCCCTCGTGACGGCTTGCTTACCAC
CTGCAGGCGAGCTGTGTGGAGCTTTACCAGCGGGAGTTCTTGGCGCTGCGCGATCGGTTGCACGCGAGCTGAGCAGG
AGAGCCTCAAGCGCTCAAGGAGCTCAACTGGTGTGGACAGATCAAGAGGGCCGTGTGAGAAAAGCAGGCGC
TGGGAGACGAGAGACGGCAATCGCACCTGGGGCGCGCTAACAGAGGACCCCGATTGAAGCCGTGGAACGGCTCAC
ACCGCGACGTGCTGCACCTGCCACCGCTCTTCCATCACCTGCCACACCTGTGCGCAAGGAGAGCAGTCTGCAGC
CCGCGGTGCGCGTGGGCCAGGGCCGCACCGAGTGTGCGTGTGATGGGCATCCCGAGCGTGGCGCGCAGGTTGC
ACTCGTACCTGACTGACACTTGCACCTCGCTCATCTCCGAGCTGAGCCCGCAGGAGAAGGAGGACTCGGTCACTG
TGGTGTGATCGCCGAGACTGACTCACAGTACACTTCGGCAGTGACAGAGAATCAAGGCCCTGTGTTCCCCACGG
AGATCCATTCTGGGCTCCTGGAGGTCACTCACCTCCCGCCACTTCTACCTGACTTCTCCCGCTCCGAGAGT
CCCTTTGGGACCCCAAGGAGAGAGTCAAGTGTGAGGACCAAGAACCTCGATTACTGCTTCTCATGATGTAGC
CGCAGTCCAAGGCACTTACTACGTGCAGCTGGAGGATGACATCGTGGCCAAGCCCACTACCTGAGCACCATGA
AGAATTTGCACTGCAGCAGCTTCAGAGGACTGGATGATCTGGAGTTCTCCAGCTGGGCTTCATTGGTAAGA
TGTTCAAGTTCGTGGACCTGAGCCTGATTGTAGAGTTCAATCTCATGTCTACCGGGACAAGCCCATCGACTGGC
TCTTGGACCATATTCTGTGGGTGAAAGCTGTGCAACCCGAGAAGGATGCGAAGCACTGTGACCGGCAGAAAAGCCA
ACCTGCGGATCCGCTTCAAACCGTCCCTCTTCCAGCAGTGGGCACTCACTCTCGCTGGCTGGCAAGATCCAGA
AACTGAAGGACAAAGACTTTGAAAGCAGCGCTGCGGAAGGAGCATGTGAACCGCCAGCAGAGGTTGAGCACGA
GCCTGAAGACATACCAGCACTTCACCTGGAGAAAGCCTACCTGCGCGAGGACTTCTTCTGGGCTTCACCCCTG
CCGCGGGGAGCTTTCATCCGCTTCGCTTCTTCCAACCTCTAAGACTGGAGCGGTTCTTCTCCGAGTGGGAACA
TCGAGCACCCGGAGGACAAGCTCTTCAACACGTCTGTGGAGTGTGTCCTTCGACAACCTTCAGTCAGACAAGS
AGGCCCTCGCAGAGGGCCCGCACCGCCACCTCCGGTACCTCTCGAGGCCCGGACGGCTACCTCCAGATCGGCTCT
TCTACAAGGAGTGGCAGAGGGAGAGGTGGACCCAGCTCTCGGCCCTCTGGAAGCACTGCGCCTCTCGATCCAGA
CGGACTCCCTCTGTGTGGGTGATTCTGAGCGAGATCTTCTGAAAGAGGCCGCTAGAGTGGCGGCTCTTGAGGGT
ACCTCTGTGGCAGCCCTGAAGCCACATTTCTGGGGGTGTCGCTACTGCGCTCCCGAGGGCCAGATACGGGCC
CGCCCAAAGGGTTCTGCTTGGCTCGGGCTTGGGCGGCGCTGGGGTTCGCGCTGCGCCGAGGCGCTTAGGAGCT
GGTGTGTCCTCCCGCGCGCGGGCGGAGGAGGAGGCGGCGCCACACTGTGCTTGGAGCCGGAACCGTTG
CACCGGGCTGCGCCAGTCAGGCGGTTTTAGAAGAGCTTTTACTTGGCGCCCGCGCTCTTGGCGGCAACCTG
GAATGCATATACTACTTTATGTGCTGTGTTTTTATCTTGGATACATTGATTTTTTCACTGAAGTCCACATAT
ACTTCTATAAGAGCGTGACTTGTATAAAGGGTTAATGAAG

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FIGURE 1849

MSRVAGTRIDVNELLQRWTPRCVRWHTGGARRVALDRPLVTACLPPAGDVVDVYQREFLALRDLHAAEQESLKR
SKELNLVLDEIKRAVSEKALRDGDGNRTWGRLTEDPRLKPWNGSHRHVHLPTVVFHHLPHLLAKESSLPQPAVRV
GQGRGTGVSVMGIPSVRREVHSYLTDTLHSLISELSPQEKEDSVIVVLI AETDSQYTS AVTENIKALFPTEIHSG
LLEVISPSPFYDPDFSRLESFSGDPKERVWRRTKQNLDYCFLMMYAQSKGIYYVQLEDDIVAKPNYLS TMKNFAL
QQPSEDMILEFSQLGFIGMKFSLDLSLIVEFILMFYRDKPIDWLLDHLWVKVCNPEKDAKHCDRQKANLRIR
FKPSLFQHVGTSSLAGKIQKLKDKDFGKQALRKEHVNPPAEVSTSLKTYQHFTLEKAYLREDFFWAFTPAAGDF
IRFRFFQPLRLERFFFRSGNIEHPEDKLFNTSVEVLPFDNPPQSDKEALQEGRTATLRYPRSPDGYLQIGSFYKGV
AEGEVDPAFGPLEALRLSIQTDSPVWVILSEIFLKKAD

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FIGURE 1850

TTTTTTTTTTCGTCCTTAGCCACGCAGAAAGTCGCGTGTCTAGTTTGTTCGACGCCGCCGCTAAGAGACGATG

ATGTTGGGCACGGAAGGTGGAGAGGGATTTCGTGGTGAAGGTCGGGGCTTGCCCTGGTCTTGCTCGCCCGATGAA
 GTGCAGAGGTTTTTTCTGACTGCAAAATTCAAAATGGGGCTCAAGGTATTCGTTTCATCTACACCAGAGAAGGC
 AGACCAAGTGGCGAGGGCTTTTGTGTAAGTTGAATCAGAAGATGAAGTCAAAATGGCCCTGAAAAAAGACAGAGAA
 ACTATGGGACACAGATATGTTGAAGTATTCAGTCAAAACACGTTGAAATGGATTGGGTGTTGAAGCATACTGGT
 CCAAAATAGTCTGTACACGGCCAAATGATGGCTTTGTACGGCTTAGAGGACTTCCCTTTGGATGTAGCAAGGAAGAA
 ATTGTTCAAGTTCTCTCAGGGTTGGAAATCGTGCCAAATGGGATAACATTGCCGGTGGACTTCCAGGGGAGGAGT
 ACGGGGGAGGCCCTTCGTGCAGTTTGGCTTACAGGAAATAGCTGAAAGGCTCTAAAGAAACACAAGGAAAGAATA
 GGGCACAGGTATATTGAAATCITTAAGAGCAGTAGAGCTGAAGTTAGAACTCATTATGATCCACCACGAAAGCTT
 ATGGCCATGCAGCGGCCAGGTCCTTATGACAGACCTGGGGCTGGTAGAGGTATAACAGCATTGGCAGAGGAGCT
 GGCTTTGAGAGGATGAGGCGTGGTGCTTATGGTGGAGGCTATGGAGGCTATGATGATTACAATGGCTATAATGAT
 GGCTATGGATTGGGTCAGATAGATTGGAAGAGACCTCAATTACTGTTTTTCAGGAATGCTGTATCAGATAC
 GGGGATGGTGGCTCTACTTCCAGAGACACAACAGGACACTGTGTACACATCGGGGATTACCTTACAGAGCTACT
 GAGAATGACATTTATAATTTTTTTCACCGCTCAACCCCTGTGAGAGTACACATTGAAATTTGGTCTGATGGCAGA
 GTAACCTGGTGAAGCAGATGTGAGTTGCGAACTCATGAAGATGCTGTGGCAGCTATGTCAAAGACAAAGCAAAT
 ATGCAACACAGATATGTAGAATCTTCTGAAATCTACAGCAGGAGCAAGCGGTGGTGCTTACGAACACAGATAT
 GTAGAATCTTCTTGAATCTACAGCAGGAGCAAGCGGTGGTGCTTATGGTAGCCAAATGATGGGAGGCTATGGGC
 TTGTCAAACCAAGTCCAGCTACGGGGGCCAGCCAGCCAGCAGCTGAGTGGGGGTTACGAGGCCGCTACGGTGGC
 CAGAGCAGCATGAGTGGATACGACCAAGTTTTACAGGAAAACCTCCAGTGATTTTCAATCAACATTCATAGGTA
 ACCAAGGAGCAGTGAACAGCAGCTACACAGTAGTGGAAGCCGTGCATCTATGGCGGTGAACGGAATGGGAGGGT
 TGCTAGCATGTCCAGTATGAGTGGTGGATGGGGAATGTAATTGATCGATCCTGATCACTGACTCTTGGTCAACC
 TTTTTTTTTTTTTTTTTTCTTTAAGAAAACCTCAGTTTAAACAGTTTCTGCAATACAAGCTTGATGATTATGCTT
 ACTCTAAGTGAAGTACAGGATTGTTATGAAGACTTAAGGCCAGTATTTTGAATACAATCTCATCTAGGATGT
 AACAGTGAAGCTGAGTAACTATAACTGTTAAACTTAAAGTTCCAGCTTTTCTCAAGTTAGTTATAGGATGTACTT
 AAGCAGTAAGCGTATTTAGGTAAAGCAGTTGAATTAATGTTAAATGTTGCCCTTGGCCACGTTAAATTTGAACACT
 GTTTTGGATGCATGTTGAAAGACATGCTTTTATTTTTTTTGTAAAACATATAGGAGCTGTGCTACTATTAAAA
 GTGAAACATTTGGCATGTTTGTAAATCTAGTTTCAITTTAATAACCTGTAAGGCACGTAAGTTTAAAGCTTTTT
 TTTTTTAAAGTTAATGGGAAAAATTTGAGACGCAATACCAATCTTAGGATTTTGGTCTTGGTGTGTTGATGAA
 TCTGAGGCCCTTGATTTAAATCTTTCATTGTATTGTGATTTCCCTTTAGGTATATTGCGCTAAGTGAACCTTGTC
 AAAATAATCTCTCTTTTAAAACTGC

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FIGURE 1851

MMLGTEGEGGFVVKVRLPWSCSADEVQRFFSDCKIQNGAQGIRFIYTREGRPSGEAFVELESEDEVKLALKKDR
ETMGHRYVEVFKSNNVEMDWLKHITGPNSPDTANDGFVRLRGLPFGCSKEEIVQFFSGLEIVPNGITLPVDFQGR
STGEAFVQFASQEI AEKALKKKKERIGHRYIEIFKSSRAEVRTHYDPPRKLAMQRP GPYDRPGAGRGYNSIGRG
AGFERMRGAYGGYGGYDDYNGYNDGYGFGSDRFGRDLNYCFSGMSDHRYGDGGSTFQSTIGHCVHMRGLPYRA
TENDIYNFFSPLNPVRVHIEIGPDGRVIGEADVEFATHEDAVAAMSKDKANMQHRYVELFLNSTAGASGGAYEHR
YVELFLNSTAGASGGAYGSQMMGGMGLSNQSSYGGPASQQLSGYGGYGGQSSMSGYDQVLQENSSDFQSNIA

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FIGURE 1852

CTGCAAGGCGGCGGCAGGAGAGGTTGTGGTGCTAGTTTCTCTAAGCCATCCAGTGCCATCCTCGTCGCTGCAGCG
ACACCGCTCTCGCCGCCCGCATGACTGAGCAGATGACCCCTTCGTGGCACCCCTCAAGGGCCACAACGGCTGGGTAA
CCCAGATCGCTACTACCCCGCAGTTCCCGGACATGATCCTCTCCGCCCTCTCGAGATAAGACCATCATCATGTGGA
AACTGACCAGGGATGAGACCAACTATGGAATCCACAGCGTGCTCTCGGGGTCACTCCCACTTTGTTAGTGATG
TGGTTATCTCCTCAGATGGCCAGTTTGCCCTCTCAGGCTCCTGGGATGGAACCCCTGCGCCTCTGGGATCTCACAA
CGGGCACCAACACGAGGCGATTGTGGGCCATACCAAGGATGTGCTGAGTGTGGCCCTTCCTCTGACAACCGGC
AGATTGTCTCTGGATCTCGAGATAAAACCATCAAGCTATGGAATACCCCTGGGTGTGTGCAAAATACACTGTCCAGG
ATGAGAGCCACTCAGAGTGGGTGTCTTGTGTCCGCTTCGCCCCAACAGCAGCAACCCCTATCATCGTCTCCTGTG
GCTGGGACAAGCTGTGTCAGGTATGGAACCTGGCTAACTGCAAGCTGAAGACCAACCACATTGGCCACACAGGCT
ATCTGAACACGGTGACTGTCTCTCCAGATGGATCCCTCTGTGCTTCTGGAGGCAAGGATGGCCAGGCCATGTTAT
GGGATCTCAACGAAGGCAACACCTTTACACGCTAGATGGTGGGGACATCATCAACGCCCTGTGCTTCAGCCCTA
ACCGCTACTGGCTGTGTGCTGCCACAGGCCCCAGCATCAAGATCTGGGATTTAGAGGGAAAGATCATTTGTAGATG
AACTGAAGCAAGAAGTTATCAGTACCAGCAGCAAGGCAGAACCAACCCAGTGCACTTCCTGGCCTGGTCTGCTG
ATGGCCAGACTCTGTTTGCTGGCTACACGGACAACCTGGTGCAGTGTGGCAGGTGACCATTGGCACACGCTAGA
AGTTTATGGCAGAGCTTTACAAATA

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FIGURE 1853

MTEQMTLRGTLKGHNWVTQIATTPQFPDMILSASRDKTIIMWKLTRDETNYGIPQRALRGHSHFVSDVVISSDG
QFALSGSWDGLRLWDLTTGTTTTRRFVGHTKDVLVSAFSSDNRQIVSGSRDKTIKLWNILGVCKYTVQDESHSEW
VSCVRFSPNSSNPIIVSCGWDKLVKVWNLANCKLKTNHIGHTGYLNTVIVSPDGS LCASGGKDGQAMLWDLNEGK
HLYTLGGDIINALCFSPNRYWLCAATGPSIKIWDLGKIIIVDELKQEVISTSSKAEPQCTSLAWSADGQTLFA
GYTDNLVRVWQVTIGTR

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FIGURE 1854

GCGGAGCCACGGAGCCACGGAGGAGCCACGGAGGAGCCACGCGTCCGAACGGGCGAGACCCCTCGAGCCGC
 GAAGGAGCCCGAGAAAGCAGCCACGATGTCGCGAATCTTTGCTACATGAACACAGAGTCCCCGGAGCAGGAAG
 GAGATCTTTCGAAACCTCATCAAGGGCTCGACGGCGTGGAGTACAGAGGCTACGACTCGGCAGGTGTGGCGATC
 GATGGGAATAATCAGGAAGTCAAAGAAAGACACATTACGCTGGTCAAGAAAAGGGGGAAGTCAAGGCTCTCGAT
 GAAGAACTTTACAACAAGACAGCATGGACTTAAAGTGGAGTTTGAGACACACTTCGGCATTGCCACAGCGCG
 TGGGCCACCCAGGGGTCCCCAGTGTCTCAACAGCCACCCTCAGCGCTCAGACAAAGGCAACGAATTTGTTGTC
 ATCCACAATGGGATCATACAATTTACAAGATCTGAGGAAATTTCTGGAAAGCAAAGGCTACGAGTTTGAGTCA
 GAAACAGATACAGAGACCATCGCCAAGCTGATTAATATGTGTTGACAAACAGAGAACTCGAGGACATTACGTTT
 TCAACGTGTGTCGAGAGAGTCATTACGAGTTGGAAGGTGCATTCCGCTGGTTTTCAAGAGTGTCCACTACCCA
 GGAGAAGCGGTGGCCACAGGAGAGCGAGCCCTGCTCATCGGAGTCCGGAGCAAAATACAAGCTCTCCACAGAA
 CAGATCCCTATCTTATACAGGACGTGCACCTGGAGAAATGTGAAGAATATCTGTAAGACACGGATGAAGAGGCTG
 GACAGCTCCGCTGCTGATGCTGTGGGCGACAAGGCCGTGGAATTTCTTTTGGTTCTGTATGCAAGCGCTATC
 ATAGAGCACACCAACGGGTCATCTTCTGGAGGACGATGACATCGCCGAGTGGCTGTATGGGAACTCTCCATT
 CACCGGGTCAAGCGCTCGGCCAGTGTATGCCATCTCGAGCCATCCAGACCTTCGAGATGGAAGTGCAGCAAAATC
 ATGAAAGGTAACTTCAGTGCCTTATCGAGAAGGAGATCTTCGAAACAGCCAGAACTCAGTTTTCAATACTATGAGA
 GGTCCGGTGAATTTTGAACCAACACAGCTGCTCTTGGGTGGCTTGAAGGACCACTTGAAGGAGATTTCGACGATGC
 CGACGGCTCATCGTGATTGGCTGTGAACACAGTACCACGCTGCCGTGGCTACCGCGCAAGTTTTTGAGGAAGCTG
 ACTGAGCTTCTGTGATGGTTGAACCTTGCTAGTGATTTTCTGGACAGGAACACACCTGTGTTCAGGGATGACGTT
 TGTCTTTTATCAGCCAGTCAGGCGAGACCGCGGACACCTCTCGCGCTGCGCTACTGTAAGGACCGCGCGCT
 CTCACCTGGGCGCTCACCAACACCGTGGGAGCTCCATCTCTCGCGAGACCGAGTGCAGGCTGCACATCAACGCA
 GGGCCGGAGATCGGGTGGCCGACCAAGGCTTATACAGTCAAGTTCATCTCTGTGGTGATTTGGTTTGATG
 ATGTCTGAAGACCGAATTTCACTACAAAACAGGAGGCAAGAGATCATCCGTGGCTTGAGATCTTTACCTGAGCTG
 ATCAAGGAAGTGCTGTCTTGGAGGAGAAGATCCACGACTTGGCCCTGGAGCTCTACACGCAGAGATCGCTGCTG
 GTGATGGGGCGGGGCTACAACATGCCCACCTGCGCTGGAAGGAGCCCTGAAATTAAGAGATAACCTACATGCAC
 TCAAGAGGCACTCTGGCTGGGAGGCTGAAGCAGCGGCCCTTGGCAGTGTGACAAAGCAGATGCCCGTCACTAG
 GTCAATTGAAGGATCCTTGCTTCCGCAAAATGCCAGAACGCCCTGACAGCAAGTCCAGGCGCCGACGGGTGCCGCC
 ATTATACTGTGCTCCAAGGACGATACTGAAAGTTTCAAGTTTGGCTATAAGACAATGAGCTGCCCCACACTGTG
 GACTGCTCCAGGAGATCTCTGAGCGTGATTCGCGTGCAGCTGCTGTCTTCCACCTGGCTGTTCTCCGAGGATAT
 GACGTTGATCTCCCGCAAAATCTGGCCAAGTCTGTAACCTGTGGAATGAGGCTGAGACCGTGACAGACCATCACC
 ACCTTTCACTGTGATTCAGACCTGTGCCAACAGCAGGGATGCTACATGGGAAGAGAAGTGGACATCCCATGTT
 CTCGCTGCTCTGTAGAGCTTGACAGCTTCCACGTGCCTTCTACCAAGTGCTTTGCTTACAGCAGATACTGTT
 TCTCTGTGCTGTAAGTTCGCGAGAGGCAAGGGAATCATTGTTACATAGGGGATCAGAGCAGACTTCCCATC
 ACTGTGCAATAGAGATACAGCTCTCTTCAGAGTAACTGTGAACCTTTTATAACCAACACTAGAGTTAGTTTTAA
 AGACAGATATTTATAATGACAGCTGTATAGCTTTAAGTTATTTTCTAGTTATTTCTGATGACCGGTGT
 AACGGCCAACTGTTCATCTAGCTACCCATGCTCTGTGTCAGGCTTGCTCTGGCAGGTGGCAATCATCTCAG
 ATGTGAGCAAAAGGCAATGGCCCTCTGGACTCCTTTCTCCTTTTCTTCTCTTAGGCTGCTCCTGAATCCTGT
 TCTCTGACATCCGTTGAAGCCCTCTGCAATCCCTATGCTCCTATAAGTCCAGTTGAAATCTCAGCCCTCCTT
 AAGCTTTCTTCTCTGTGTGGCCACATCCCTCCACTTCTCCTCACTCTGTTTAAATCTGATCAGCGCTCTTTT
 AGCCTCTGGCAGACTTTGGTCCCTGCTCTTGGCCATGATAAAACAGCTTGAATATCCCATGCAAGAGAGTAG
 TTCAAGTGGGCGACTCTGCTCTCTATTAAAGCGGTGCACAAATCAAAGTACTATGCAATTTTAGGACAATAAA
 GAACATACAGTTCC

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FIGURE 1855

MCGIFAYMNYRVPRTKEIFETLIKGLQRLEYRGYDSAGVAIDGNNHEVKERHIQLVKKRGKVKALDEELYKQDS
MDLKVEFETHFGIAHTRWATHGVPSAVNSHPQRSCKGNEFVVIHNGIITNYKDLRKFLSKGYEFESSETDTETIA
KLIKVVFDNRETEDITFSLVERVIQLEGAFALVFKSVHYPGAVATRRGSPLLIGVRSKYKLSTEQIPILYRT
CTLENVKNICKTRMKRLDSSACLHAGVDKAVEFFAFSDASAIIEHTNRVIFLEDDDDIAAVADGKLSIHRVKRSAS
DDPSRAIQTLMELQQIMKGNFSAFMQKEIFEQPESEVNTMRGRNVFETNTVLLGGLKDHLEIRRCRLIVIGC
GTSYHAAVATRQVLEELTELPVMVELASDFLDNTPVFRDDVCFEISQSGETADTLALRYCKDRGALTGVGTNT
VGSSISREIDCGVHINAGPEIGVASTKAYTSQFISLVMFGLMMSEDRISLQNRQETIRGLRSLPELIKEVLSLE
EKIHDLALELYTQRSLLVMGRGYNATCLEGALKIKEITYMHSEGILAGELKHGPLALIDKQMPVIMVIMKDPFC
AKCQNALQOVATARQGRPILCSKDDTESSKFAYKTIELPHTVDCLOGILSVIPLQLLSFHLAVLRGYDVDFPRNL
AKSVTVE

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FIGURE 1856

ATGGAGAACCGAGGAAGAGAAACAGGTTTTGTGGAAGACAAGCACAAAGTCCACGCCTAGGTGTATGGGAAGTGAG
GTCTCATGGGCGATAGCTACAGAGATCCCTTTTTTGGAGGGATGACTCGAGATGAAGATGATGATGAGGAAGAA
GAGGAAGAAGGGGCTCATGGGCTGTGGGAACCCAAGCTTCAGCCAGGAGGAGGGATACGTTTCACGATAAC
TTCGGCTTTGATGACCTAGTACAAGATTCAATAGCATCTTCAGCAATATGGGGCCTGGACCTTGCTTCCCAT
CCTCCTGAACCTCCAGTTCTGAGTCAGAGACACCTGGTGAGAGACTGCGGGAGGGACAGGCACTTCGAGAATCA
ATGCTTAAGTATCCAGATAGTCACCAGCCCAGGATCTTTGAGGGGGTCTTGGAGAGTGATGCAAGAAGAGCGTCT
TGGCCCGGTTCTACAGCCCAGCCCAGATCTACTTCAAGAGCATCTCTGTGACCAAAATCACTAAGCCAGATGGG
ATAGTGGAGGAGCGCTGGACTGTGGTGGACACCCTGGATGATGCCTTCTCCATCCTGGACTTATTCCTAGGATGC
TGGTTCGGTCCCGGTAG

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FIGURE 1857

ATGGCCCCACAGTGTGGAGAGTGGACGGACAGACAGAAGCAGTGTGTGCAGCCTTGCCTCTCATCAGAGTCACT
GGGAGCAGGATTTCCTTTGACCTCGCTGAGTACACTGCGGACGTTGACGGAGTTGGCACTCTACGACTTCTAGAT
GCAGTTAAGACTTGTGGCCTTATCAACTCTGTGAAGTTCTACCAAGCCTCAACAAGTGAACTTTATGGGAAAGTG
CAGGAAATACCCAGAAGGAGACCACCCCTTTCTATCCCGGTCACCCATATGGTGAGAACATGCGTGCACACCGG
AGCACATGTGTGGCGTTATCTGTGGGTGTGGGGGGGCAGAAAACCTCTATGCCATTGGATTGTGGTGAAC TTC
CGTGAGGCGTATAATCTCTTTGCAGTGAACGGCATTCTCTTCAATCATGAGAGTCCAGAAGAGGAGATCAGTTG
AAGATTTCCGTCTTTCGATGA

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FIGURE 1858

CTGATGGCATCTTCTAAGCTGAAATGAATGAGTTTCTTACTCAGGAGCTGGCTGAAGATGGCTACTCTGGAGTTG
AGATGCGAGTTACACCAACCAGGACAGAAATCATTGTCTTAGCCACCAGAACACAGAATGTTCTTGSTGAGAAGG
GCCGGCGGATTGCGGAACTGACTGCTGTAGTTCAGAAGAGGTTTGGCTCTCCAGGCAGAGTCTCTGCCTTACAAA
dTCTAGGAGGGCTTGCTGTGCGGAGGGCCTGCTATGGTGTGTCGCGGTTTCATCATGGAAGTGGGGCCAAAGGC
TGTGAGGTCGIGGIGTCTGGGAACTCTGAGGACAGAGAGCTAAATCCATGAAGTTTGTTGA

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FIGURE 1859A

CCGACCAACCAACACCCAGCTCGAGCGAGCTCTCTGCGCCCTTGCCGCCCTCCGAGCCACAGCTTTCTCC
CGCTCTGCCCCGGGCCCTCGCGCTCTCCGCGCTCGCAGCGGCCCTCGGGAGGGCCAGGTAGCGAGCAGCGACC
TCGCGAGCCTTCGCGACTCCGCGCCGGTTCCCGCGCGTCCGCTATCCTTTGCCGCTCCGCTTTCTCCGCGCC
GGCCCCCTCGCTTATGCTCGCGCTGAGCCGCTCTCCGATTTGCCCGCGACATGAGCTGCAACGGAGGCTCC
CACCCCGGGATCAACACTCTGGGCCGATGATCCGCGCCGAGTCTGGCCCCGAGCTGCGCTACGAGTGACAGCAG
GGCGGGGGGGGACCGCAGGATGTACTATTCTGGCGGGCGGTGATCACOGACCAGAACTCGAGCGGCTACTGT
CAAAACCGGCAGATGTCAGGCGACCAGAACCAACCACTCCAGGAGCTGCTGAGAACTGCTCCGACTGCTTG
ATGCGAGCAGAGCTCATCTGTCGAGCTGAATTGAAGTATGGAGATGGAATACAACTGACTCGGATCGAGAATTG
GATGAGTGTTTTTCCCAGGCCAATGACCAATGGAATCTCTGACAGCTTGATCAGAGAGATGCGGCAGATGGGG
CAGCCCTGTGATGCTTACCAGAAAAGGCTTCTTCACTCCAAGAGCAAAATGCGAGCCCTTTATAAAGCCATCAGT
GTCCTCGAGTCCGAGCGGCCAGCTCCAAGGGTGGTGGAGGCTACACTTGTGAGATGGCTCTGGCTGGGATGAG
TTCACCAAACTGTACCACTGAATGTTGGGGTGGATGAGGCGAGCAAGGGCGGAGATGGACATGTTGGCCCTGG
GGTGTGGACCTGGCCTCAGTGGAGCAGCAATTAACAGCCACCGGGGCTCCAACTCTACAGTTGGAGGAGGATGA
TGGCAGCTGGACAAAATCAAAGCCGAGCTCGCGGAGAAATCTGCGATCTACCACTTGGAGGAGGATGA
CTGCTGAAAGCGTCTTTAGAGAGATGGATCACTGCGACAGCTGCGAGAACATCATTCAAGCCAGCTCCAGGGAG
ATCATTTGGATCAATGATCGCAGGAGGAGGAGTGTGATGACTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG
AAACAGGAGGCTTCTCCATACGATAGTCACTGGAAGTTAAAGAAAAGAGCTCAATAGCTGAAACAGAA
AGTGACCACTTGTCTCAATCAGCATCCAGCTTCAGACAAAATGAGGCTATATGGACATCTGCGAGCGAG
TGAAGTTGGATTTCTCAGATCACCAGTGCAATTGATGTTGATCTGAAAAAATGCTGCTACTTTCAGTTTGTG
AAGAGGCGCAGTCTACTGAAGCATATCTGAAGGGGCTCCAGGACTCCATCAGGAAGAGTACCCCTGCGACAAGA
ACATGGCCCTGAGTCTGCGAACAGATCAAGGAGCTGGAGAAAGCAGAGAGAAATCCTTGAATCAAGC
GTGAGGTGCGAAGCTTGGTAAACAAGTCTAAGAAATGTTACAGCTGAAGGCTCGTAACCCAGACTACAGAGCA
ATAAACCCATTATTCTCAGAGCTCTCTGTGACTACAAACAAGATCAGAAAAATCTGTCATAGGGGGATGAGTGA
TCTTGAAGGACACAACAGTACGCGCAAGTGGTACGTGACGGGCCGGGAGGCGTTGACATGCTTGTCTCCCTCTG
TGGGGCTGATCATCCTCTCCGAAACCCTAGGCGGTGGACCTCTCTTGAAGATTGAGCAGTACTACGAAGCCA
TCTTGGCTCTGTGGAACGCTCTACATCAACATGAAGAGCTGTTGCTCTGGCACTACTGCAATGATTGACATAG
AGAAGATCAGGGCCATGACAATCGCCAGCTGAAAAAATGCGGCAGGAAGATTACATGAAGACGATAGCCGACC
TTGAGTTACATTACCAAGATGCTCAGAGAAATAGCCAGGCTCAGAGATGTTTGGAGATGATGACAAGCGGAAAA
TACAGTCTCAGTTCACCGATGCCAGAGCAATTACCAAGCCTGTCATTCAGCTCCTTGGCTATCCCCAGCACC
AGACAGTGACCACTCAATCATCATCATGGAACCTGCCAAGATGTCAACCAATATAAGATTAATTGAACCA
ACAGAGAAAAATGACAAGCAAGAAATGGATGCTGATGGAGCTGCGAGAGATTTCGAGCACTACAGAGCTCGG
AGGCGAGGATGACTCTCAAAAACCTCCCTCTAGCAGACCAGGATCTCTTCAACACATCAGAGTAAAAATTAAG
AGCTTAAAGGTGTGCGAAGTATTACAAAGCAATTGCTGAGGTTCTCAACCAGCTTAAAGATATGCTTGGCAACT
TCAGAGGTTCTGAAAAGTACTGCTATTTACAGAAATGAGTATTGGAATTTTCAGAACTGGAAAAATCAATG
GTGTTACAGATGGCTACTTAAATAGCTTATGCACAGTAAGGGCACTGCTCCAGGCTATTCTCCAAACAGAGACA
TGTTAAAGGTTTATGAAGCCAGGCTCACTGAGGAGGAACTGCTGCTGGACCTGATGAGTAAAGAGCTTACC
GCTGTGGACTGAAGAAAAATAAAAATGACTTGAACCTTGAAGAAGTCGTTGTTGGCCACTATGAAGACAGAACTAC
AGAAAGCCAGCAGATCCATCTCAGAGCTTCAGACAGATATCCACTTTATGATCTGGAAGTGGGCAAGTCCGCTG
AAAAAGTACACAGCTGACAGACCGCTGGCAAGGATGATAAACAGATCGACTTTAGGTTATGGGACTGGAGA
AACAAATCAAGCAATTGAGGAATTATCTGTATAACTATCAGGCTTCTGCAAGTGGCTCTATGATGCTAAACGCC
GCCAGGATTCCTTAGAATCCATGAAATTTGGAGATTCCAACACAGCTATCGGTTTGAATGAGCAGGAAGACT
TGCAAGTGAATATCTGCGCAAGCAGACAAATCAGAGGAAGTCAAGAAAAATTTGCTGAACCTTGGCCCAATTCAA
TTAAGGATTAAGCTCGAGCTGGCCCTCATACACTCAGGACTGGAAACTCTGCTGAACATACCTTCAAGAGGA
CCATGATTCAGGCTCCCTCTGCGGCTGATTCTGCAAGAGGCTGAGATGTTGAGGATGCTGAAGTGAAGTGAAGTGA
CAAGATCTGGAGACTATTACAGGTTCTTAAGTGAGATGCTGAAGAGTTTGAAGAGTCTGAAGCTGAAAAATACCA
AGATCGAAGTTTGAAGAGGAGCTCAGACTGGCCGAGATGCCAACTCGGAAAACTGTAATAAGAACAAATTC
TGGATCGAAACCTGCAGAAATACAGGCAGAGTGTCCAGTTCGAAGCGAAGCTTGCAGGCTGGAGGAGCTGA
AGAGACAGGCTGAGCTGGATGGGAAGTCGGCTAAGCAAAATCTAGACAAGTCTCAGGCCAAATAAAAAGACTCA

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FIGURE 1859B

ATGAGAAGATCACCCGACTGACTTATGAGATTGAAGATGAAAAGAGAAGAAGAAATCTGTGGAAGACAGATTG
ACCAACAGAGAAGTACTATGACCAACTGCAGAAAGCAAGGCATGTGAAAAGGAGAACCTTGGTTGGCAGAAAT
TAGAGCTCTGAGAAGCCATCAAGGAGCAAGGAGTACGAGATTGAAAGGTTGAGGCTTCTACTGTCCAGGAAGAAGGCA
CCCGGAAGAGAGAAATATGAAAATGAGCTGGCAAAGGTAAAGAAACCATATATGAGGAGATGAGTAATTTAAGGA
ACAAGTATGAAACAGAGATTAACTATCGAAGACCACCATTCAAGGAGATATCCATCAAAAAGAGGATGATTGCCA
AAAGTCTTGAAGAACCGCTTGATAGACTTTCAAGGGAAGAAATCGAGATCTGAAGGATGAAATTGTCAGGCTCAATG
ACAGCATCTTGCAGGCCACTGAGCAGCGAAGGCGAGCTGAAGAAAACGCCCTTCAGCAAAAAGGCGCTGTGGCTCTG
AGATAATGCAGAAAGAACGACATCTGGAGATAGAAGCTGAAGCAGGTCATGCAGCAGCGCTCTGAGGACAAATGCC
GGCAACAGCAGTCCCTGGAGGAGGCTGCCAAGACCATTCAAGCAAAAATAAAGGAGATCGAGAGACTCAAAAGCTG
AGTTTCAGGAGGAGGCCAAGCGCGCTGGGAATATGAAAATGAACTGAGTAAGSTAAGAAACAAATATGATGAGG
AGATCATTAGCTTAAAAAATCAGTTTGAGACCGAGATCAACATCACCAAGACCACATCCACCAGCTCACCATGCG
AGAAGGAAGAGGATAACAGTGGCTACCGGGCTCAGATAGACAAATCTCACCCGAGAAAACAGGAGCTTATCTGAAG
AAAAAAGAGGCTGAAGAACACTCTAACCCAGACCACAGAGAATCTCAGGAGGGTGGAAAGAACATCCCAACAGC
AAAAGGCCACTGGCTCTGAGGTGCTCAGAGGAAAACAGCAGCTGGAGGTTGAGCTGAGACAACTCCTCAGATGC
GAACAGAGGAGAGCGGTAAATATAAGCAATCTCTTGATGATGCTGCCAAAACCATCCAGGATAAAAAACAGGAGA
TAGAAGGGTTAAACAACTGATCGCAAAAGAAACAAATGACCCGAAATGCCTGGAAGATGAAAACCGGAGATTAC
AAAGGGTCCAGTATGACCTGCAGAAAGCAACAGTAGTGCAGCGGAGACAAATAAACAACTGAAGGTTCAAGGAGC
AAGAATCTGACAGCGCTGAGGATCGACTGAAAGGGTTCCCGAGAGAGGACTGTGAAGGACCGGATATCACGC
GGTTCAGAACTCTCTGAAAGAGCTGCAGCTGCAGAAAGCAGAAGGTGGAAGGAGCTGAATCGGCTGAAGAGGA
CCGGCTCAGAGACTCTCAACAGGAGGAAGAGCTGGAGGAAGAGCTGGAAGGCTGAGGAGGTCGCTGAAGGAGC
AAGCCATCAAAATCAACCACTGACCCAGCAGCTGGAGCAGGATCCATTGTTAAGAAAGAGGATGAGGATGACC
TCCGGCAGCAGAGGGAGCTGCTGATGACCACCTGAGGGAAAAGCAGAGGACCCAGGAGAGCTGAGGAGGCTCT
CTCTCGAGGTCGAGGCCCTGAGGCGGCAGTTACTCCAGGAACAGGAAAGTCTCAAAACAGCTCATGAGGAATG
AGCATTTCCAGAAAGCGGATGAAGATAAAAAGCAGAAGCTTAAATGAAAGCAAAATAGAAATGAGAGGCTGCACT
CTCTCACAGAGAACTGACCAAGGAGCACTTGATGTTAGAAGAAAGACTGCGGAACTGAGGCTGGATACGATG
ACCTGAGGAGAGGACGAAGCGAAGCGGACAGTGAATAAATGCAACCATCTTGAAGTAAGGAGCCAGCTGCAGA
TCAGCAACAAACCGGACCTTGAAGTGCAGGSGCTGATTAATGATTACAGAGAGAGAGGGAAAATTTGAGACAGG
TAATTTAGAGAAATCCAAAAGCAGGCTTTAGAGGCACTTAATAGGATTCAAGAAATCAAGAAATCAGTGTACTCAGG
GGATCAGGAAAGAGAGAGCGCTTCTGGTGAATAATCAAGTCTCTGGAGCAAGAACAGGCAAGGCTGCAGAGGCTGG
AGSATGAGCTGAATCGTGCAAAATCAACTTAGAGGCAGAAACAGGCTGAAACAGCGCTGGATGTGAGAAAC
CGGAAAGAGAAAGAGTGAAGAGAGAGAAGAACAGTCTTAGGAGTGAGATCGAAAGACTCCAAGAGAGATCAAGA
GAATTTAAGAGAGGTTGACGCGTAAGCTGGAGGATTCTACCAGGGAGACACAGTCAAGTTAGAACAGAACCTG
CCGATATCAGAGAGGATGATGATAAATCAGACAGCGCCATATGGGTCCTATCGAGAGACCCAGACTGAGTGTG
AGTGGACCGTTGACACTCCAAGCTGGTGTGATGGGCTGAGGAAGAAGGTGACAGCAATGCAGCTCTATGAGT
GTCAGCTGATGCACAAAACAACCTTGGCAAACTTGAAGGGAAGAAGTCAAGTGGGAGGAGGAGGAGGAGGAGG
TCCAGCCATCTCTCGGGGTGCGAGGATCTACTCGTGAGCATCTGCTCTCTCAAGGAAAAATATCTTTTGGTAG
AGGCCAAGAGAAAGAAATTAATCAGCCAGAAATCCACAGTCAATGCTTCTGGAGGCCAGGCAAGCTACAGGTGTA
TAATGTATCCCATCGGAATGAGAAAGTGAAGTCTGACAGTGCAGAGTGCATAGCTCGGAGCTCATTGATCGATGACC
GTCAGCAGATATATGACAGAGAAAAGCTATCACTGGTTTGTGATGCCATTTTCAGGCAAGACAGATATCTGTTT
CAGAAGCGATCAAGAAAAATTTGATGATAGAGAAACCGGAATGCGGCTGTGGAAGCCCAAGTCTTCCAGGGG
GGTAGAGACCTGTGAACAGTGTCTTTTGGCAAAAGATGTGCGCTTGGCCCCGGGGCTGATGATAGAGAT
TGATTCGATCTCGTAATGATCCCCAGATAGTCAGAAAAACTTTTGGGATCCAGTCAACAAAAAGAGGTCAGTT
ACGTGCGAGCTGCAAGACCGGTGAGAAATCGAACACATCTGGTCTGCTCTGCTTTCACTTCAAGAGGAGCA
TGCTGCTTCCAAGGAATCAGACAACTGTGACCGTCACTGAGCTAGTAGATTCTGGTATATTGACACCGTCCACTG
TCAATGAAGTGAAGTCTGGTCAGATTCTTATGACGAGGTTGGTGAGAGAAATTAAGGACTTCTCCAGGTTCAA
GCTGCTGATCAGGATATACAAATGAGACCACAAAACAGAGCTTGGCATTTATGAGGCCATGAAAATTTGGCTTAG
TCCGACCTGGTACTGCTCTGAGGTTGCTGGAAGCCCAAGCAGCTACTGGCTTTATAGTGATCTGTTAGCAACT

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FIGURE 1859C

TGAGGTTACCA GTGGAGGAAGCCTACAAGAGAGGCTCTGGTGGGCCATTGAGITCAAAGAGAAGCTCCTGTCTGCAG
AACGAGCTGTCACTGGGTATAATGATCCTGAAACAGGAAACATCATCTCTTTGTTCCAAGCCATGAATAAGGAAC
TCATCGAAAAGGGCCACGGTATTGCTTATTAGAAGCACAGATCGCAACCGGGGGGATCATTGACCCAAAGGAGA
GCCATCSTTTACCA GTTGACATAGCATATAAGAGGGGCTATTTCATAGAGAACTCAGTGAGATTCTCTCAGATC
CAAGTGATGATACCAAAGGATTTTTGACCCCAACACTGAAGAAATCTTACCTATCTGCAACTAAAAGAAAGAT
GCATTAAAGGATGAGGAAACAGGGCTCTGTCTCTGCTCTGAAAGAAAAGAAACAGGTGCGAGACATCACAA
AGAAATACCTCAGGAAGCGTAGAGTGGTCATAGTTGACCCAGAAACCAATAAAGAAATGCTGTCTCAGGAGGCC
ACAAGAAAGGCCATAATTGATTATGAACCTTCAAAGAACTGTGTGAGCAGGAATGTGAATGGGAAGAAATAACCA
TCACGGGATCAGATGGCTCCACCAGGGTGGTCTGGTAGATAGAAAGACAGGCAGTCAGTATGATATTCAAGATG
CTATTGACAAAGGGCCTTGTTGACAGGAAGTTCTTTGATCAGTACCGATCCGGCAGCCTCAGCCTCACTCAATTTG
CTGACATGATCTCTTGAAAAATGGTGTGCGCACCAGCAGCAGCATGGGCAGTGGTGTGACGATGATGTTTTTA
GCAGCTCCGCACATGAATCAGTAAGTAAGATTCCACCATACTCAGCGTCAGGAATTTAACCATAAGGAGCAGCT
CTTTTTCAGACACCTTGGAAAGATCGAGCCCATTCAGCCATCTTGACACAGAAAACCTGGAGAAAAATCTCCA
TTACAGAAGGTATAGAGCGGGGCATCGTTGACAGCATCACGGGTGAGAGGCTCTGGAGGCTCAGGCCTGACAG
GTGGCATCATCCACCAACCAAGGGCCAGAAAGCTGTCACTTCAGGACGCGAGTCTCGAGGGTGTGAAGGGAAGAAAGATGT
ACATGGCCACAGGCTGAAGCCTGCTCAGAAAGCCTTCATAGGCTTCGAGGGTGTGAAGGGAAGAAAGATGT
CAGCAGCAGAGGCGAGTGAAGAAAAATGGCTCCCGTATGAGGCTGGCCAGCGCTTCTGGAGTTCCAGTACCTCA
CGGAGGCTCTGTTGACCCGGAAGTGCATGGGAGGATAAGCACCGAAGAACCATCCGGAAGGGGTTATAGATG
GCCGCCGCCACAGAGGCTCAAGACACCCAGCAGCTATGCCAAATCCTGACCTGCCCAAAACCAAAATTAAGAA
TATCCTATAAGGATGCCATAAATCGCTCCATGTTAGAGATATCACTGGGCTGGCGCTTCTGGAAGCGCGCTCCG
TGCTGCTCAAGGGCTTACCCAGGCTTACAAACATGTCTCGGCTCCGGGGTCCCGCTCCGGCTCCCGCTCCG
CTCGCTCCGGAICTCGCTCCGGGTCCCGCAGTGGGTCCCGAGAGGAAGCTTTGACGCCACAGGGAATCTCTCT
ACTCTTATTCTACTACTATTAGCAGTAGTCTTATTGGGCACTAGTAGTCAGTTGGGAGTGGTGTCTATACCTTGA
CTTCATTATATGAATTTCCATTTATTAATAATAGAAAAAGAAATCCCGTGCTTGAGTAGAGTATAGGAC
ATTCTATGCTTACAGAAAAATAGCCATGATTGAAATCAAATAGTAAAGGCTGTTCTGGCTTTTATCTCTTAG
CTCATCTTAATAAGCAGTACACTTGGATGTCAGTGCCTCTGAAGTGTCTATCAGTTGTAACAAATAGCAAAATCG
AACTTAGGATTTGTTCTCTCTCTGTGTTTCGATTTTGATCAATCTTTAAATTTTGGAGGCTATAATACAG
TTTTCTATTCTTGAGATAAAAAATTAATGGATCACTGATTTTGTACTCTGCTCTCTCATCTAAATATTTCC
ATATTCTGTATTAGGAGAAAAATACCCCTCCAGCACAGCCCCCTCTCAAACCCCAACCAAAACCAAGCAT
TTGGAATGAGTCTCTTTAGTTTCAGAGTGTGGATTGTATAACCATATACTCTTCGATGACTTGTGTTGGTTG
GTATTAATTTGACTGTGATGACAGCGCAATCTTTCTTGGTCAAAGTTTTCTGTTTATTTTGTCTGTGCATAT
TCGATGTACTTTAAGGTGTCTTTATGAAGTTTGCTATTCTGCAATAAACTTTTAGACTTTT

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FIGURE 1860

GTCATGTTCTTCGCGCCCTGGTGTGGACACTGCCAGCGGCTGCAGCCGACTTGGAAATGACCTGGGAGACAAATAC
AACAGCATGGAAGATGCCAAAGCTCTATGTGGCTAAAGTGGACTGCACGGCCCACTCCGACGTGTGCTCCGCCCCAG
GGGTTGGCAGGATACCCCACTTAAAGCTTTTCAAGCCAGGCCAAGAAGCTGTGAATGACCAAGGTCCTCGGGAC
TTCCAGACACTGGAAACTGTGATGCTGCAGACACTGAACGAGGAGCCAGTGACACCAGCCGGAAGTGGAAACCG
CCCACTGCCCCGAGCTCAAGCAAGGGCTGTATGAGCTCTCAGCAAGCAACTTTGAGCTGCAGCTTGACAAAGGC
GACCACTTTATCAAGTTCTTCGCTCCGTGGTGTGGTCACTGCAAGGCCCTGGCTCCAACCTGGGAGCAGCTGGCT
CTGGSCCTTGAACATTCCGAAACTGTCAAGATTGGCAAGGTTGATTGTACACAGCACTATGAACTCTGCTCCGGA
AACCAGGTTCTGTGGCTATCCCACTCTTCTGTGTTCCGAGATGGGAAAAAGGTGGATCAGTACAAGGGAAGCGG
GATTTGGAGTCACTGAGGGAGTACGTGGAGTCGCAGCTGCAGCGCACAGAGACTGGAGCGAAGGAGACCGCTCAG
CCCTCAGAGGCCCCGGTGTGGCAGCTGAGCCCGAGGCTGACAAGGGCACTGTGTGGCACTCACTGAAAAAATAC
TTCGATGACACCAATTGCAGAAGGAATAACCTTCATCAAGTTTATGCTCCATGGTGTGGTCATTGTAAGACTCTG
GCTCCTACTTTGGGAGGAACCTCTCAAAAAGGAATCCCTGGTCTGGCGGGGGTCAAGATCGCCGAAGTAGACTGC
ACTGCTGAACGGAATATCTGCAGCAAGTATTCGGTACGAGGCTACCCACGTTATTGCTTTCCGAGGAGGGAAG
AAAGTCAGTGAGCACAGTGGAGGCAGAGACCTTGACTCGTTACACCGCTTTGTCTGAGGCCAAGCGAAAGACGAA
CTTTAGGAACACAGTTGGAGGTCACTCTCCTGCCAGCTCCCGCACCCCTGCGTTTAGGAGTTCAGTCCCACAGA
GGCCACTGGGTTCCCACTGGTGGCTGTTCAAGAAAGCAGAACATAAGCGCTGAGGTATCTCTTTGTGTGTGTG
TTTTCCAAGCCACACTCTCAGACTTCAGATTTCTTATTAAAGTTAAGTTTCTCTAAGTAAATGTGTAACATCATGGTCAC
TGTGTAAACATTTTTCAGTGGGATATATCCCTTTGACCTTCTTTGATGAAATTTACATGGTTTCTTTTGAGAC
TAAAAATAGCCTTGGAGGAAATGAAATGCTGGACTATTGTGGCTCCTGAGTTGAGTGATTTTGTGAAAGAAAG
CACATCCAAAGCATAGTTTACCTGCCACAGATTCTGGAAAGGTGGGCTTTGTGGCAGATTGACGTTCTCTTGAT
CTTAAGGTACAGTTGACTCAATGCTGTGTGGTCCGTAGCATGGAGCAGATTGAAATGCAAAAACCCACACCT
TGGAAGATACCTTCACGGCCGCTGCTGGAGCTTCTGTTGCTGTGAATACTTCTCAGTGTGAGAGGTTAGCCGT
GATGAAAGCAGCGTTACTCTGACCGTGCCCTGAGTAAGAGAACTGATGCCATAACTTTATGTGTGCATACCTGT
TCAAAATCAGTTACTGTTTCAAGGGATCCTTCTGTTTCTACCGGGGTGAAACATGCTCTTAGTTCCTCATGTTAACA
CGAAGCCAGAGCCACATGAACCTGTGGATGCTTCCCTAGAAAGGGTAGGCATGGAAAAATCCACAGAGGCTCA
TCTCAGTATCTCATTAACTCAITGAAAGATTCCAGTTGTATTGTCACCTGGGGTGACAAGACAGACAGGCTT
TCCAGGCCCTGGGATACAGGGAGGCTCTGCAGCCCTGCTGAAGGGCCCTAACTAGAGTTCTAGAGTTTGTGATT
CTGTTTCTCAGTAGTCCCTTTAGAGGCTTGCTATACTTGGTCTGCTCAAGSAGTGCACCTCTAATGTGATGAA
GAAITGGGATGCATTTGATCTCAAGACCAAGACAGATGTCAGTGGGCTGCTCTGGCCCTGGTGTGCACGGCTGTG
GCAGCTGTTGATGCCAGTGTCTCTAATCATGCTGCTCTTGTGATTAAACACCTCTATCTCCCTTGGGAATAAG
CACATACAGGCTTAAGCTCTAAGATAGATAGGTGTTTGTCCCTTTACCATCGAGCTACTCCCATATAAACCACT
TTGCATCCAACACTCTTACCACCTCCCATACGCAAGGGGATGTGGATACTTGGCCCAAGATTAACCTGGTGGTAG
GAATCTTAGAAACAAGACCACCTTATAGTCTGCTGCTGAGGCAGAAGATAACAGCAGCATCTCGACAGCCCTCTGC
CTTAAGGAAATCTTTATTAATCAGGTATGGTTCACAGATAATCTTTTTTAAAAAAACCCCAACCTCTTAGAGA
AGCAAACTGTCAAGAGTCTGTACACAACTTCAGCTTTGCATCAGAGTCTTGATTCCAAGAAAAATCAAG
TGGTACAATTTGTTTGTACACTATGATACTTCTAAATAAACTCTTTTTTTTT

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FIGURE 1861

ATGGACAGGACTGTCATTAGAAATACCACTGTGAATGGCCACAGCTGTGAAGTTAGGAAAGCCCTGTCAAAG
CAAGAGATGGTTAGTGCTTCATCCAGCCAAAGAGGTCGAAGTGGTTCTGGAACTTTGCTGGTGGTCTTAGAAGT
GGTTTCAGTGGGAATAACAACTTTGGTCGTGGAGGAACTTCCGTGGTCGTGGGGCCTTTGGTGGCAGCCGTGGT
GGTGGTGATATGATGGCAGTGGGGATGGCTATAATGGATATGATAACGATTGA

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FIGURE 1862

ATGAAGGCCAACTACAGCGCAGAGGAGCGCTTTCTCCTGCTGGGTTTCTCCGACTGGCCTTCCCTGCAGCCGGTC
CTCTTCGCCCTTGCTCCTCCTGTGCTACCTCCTGACCTTGACGGGCAACTCGGCGCTGGTGCTGCTGGCGGTGCGC
GACCCGCGCCTGCACACGCCCATGTACTACTTCCTCTGCCACCTGGCCTTGGTAGACGCGGGCTTCACTACTAGC
GTGGTGCCGCCGCTGCTGGCCAACCTGCGCGGACCAGCGCTCTGGCTGCCGCGCAGCCACTGCACGGCCAGCTG
TGGCGCATCGCTGGCTCTGGGTTGCGCCGAATGCGTCTCCTTGGCGGTGATGGCTCTGGACCGCGCGGCCGAGTG
TGCCGCGCGCTGCGCTATGCGGGGCTCGTCTCCCCGCGCCTATGTCGCACGCTGGCCAGCGCCTCCTGGCTAAGC
GGCCTCACCAACTCGGTTGCGCAAAACCGCGCTCCTGGCTGAGCGGCCGCTGTGCGCGCCCCGCTGCTGGACCAC
TTCATCTGTGAGCTGCGGGCGTTGCTCAAGCTGGCCTGCGGAGGCGACGGAGACACTACCGAGAACCAGATGTTT
GCCGCCCGCGTGCTCATCTGCTGCTGCCGTTTGCCGTCATCCTGGCCTCTACGGTGCCCTGGCCCCGAGCTGTC
TGTGTGATGCGGTTGAGCGGAGGCCGAGGAGGGCGGTGGGCACGTGTGGGTCCACCTGACAGCCGCTGCTGCTG
TTCTACGGCTCGGCCATCTACACCTACCTGCAGCCGCGCAGCGCTACAACCAAGGACGGGGCAAGTTTCGTATCG
CTCTTCTACACCGTGSTACACCTGCTCTCAACCCGCTCATCTACACCTCAGGAATAAGAAAGTGAAGGGGGCA
GCGAGGAGGCTGCTGCGGAGTCTGGGAGAGGCCAGGCTGGGCACTGA

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FIGURE 1863

ACTTCTGGGGCAGCCGTGAGCAGCGGGCACACGGGCAGCCACGAAAGCAGCAGGAGGGTGGTCAAAACACCTCA
TAAC TACACCGAATCCAGTAGCGCTGGCGCCCCGGCGCGCAAGGCCGCTCTACTCCGCCTCATCTTTGTCCC
AAGTCCCTTTACAGCGCTGCCITTCCTCAAACGGCCCGATGCGCCCCCTCTTTGCGGAGTAGACGAGACCGCCAGC
AGCCGGCCCGCAGGTGAGTCGACCTCTCTGGATGCAGGTGCGCGGGAAACCCGGAGCGGAGCATCCCTCGGGC
CGGGAAACGCCTCGGCGCGCACCCACTGGCGCGCATGCTCAGTCCGCGGGCGGCTGCGAGTAGGAAGCTCCGC
CGGCGGGCGGGGGCGGCGACGGGCACTGGCGGGTGGGAGTGGAGGCACCGGCTGGCGGGCGGGGGTACAGGGAGC
GGG CAGGGGCTCCCGCTCCAGGTTCTTGAAGCACTTCCGACCGCGAAGCCCGCGCGAGAACGAGCTAACCCA
AGAGCCAAACACGAGCGCGGAGAGGGGCAGCGGACTGAGCGGAGCCGCGGCGGCTCGGAGCCCGGGTCT
TCCGCGCTCGGGACCCGGCTAGCGGGCGGCGGGGGCGGCATGTTCCACTGCATCCCCCTGTGGCGGTGAACCC
GTCTGTGGAGAGCATGCACAGCGCCACTGCTCGCTGGICTACGTCCCCGAGGAGATCTACCGCTATGCCCGGA
GCCTGGAGGAGCTGCTGCTGGACGCCAACCACTCCGCGAGCTGCCCGAGCAATTTTCCAGCTAGTCAAAATTAC
GAAAGCTTGGACTTAGTGATAATGAAATTCAGCGGCTCCCTCCAGAAATAGCAAACTTATGCAGCTGGTGAAC
TAGATGTGTCTCGAAATGAGATTCTCGAAATTCAGAAAGCATTTCAATTCTGTAAAGCACTGCAGGTAGCTGACT
TCAGCGGAAACCCACTGACTAGGTTGCCAGAAAGCTTTCTGTAATTACAGAAATTAACATGTCTTTCTGTAATG
ACATCTCACTACAGTCTCTACCTGAAAAATATGGCAATCTTTATAACCTGGCTTCACTGGAACCTGAGAGAGAATC
TTCTTACATATCTTCTGACTCTCTTACCCAGCTGCGAAGACTAGAAGAACTTGATTTAGGAAACAAATGAAATAT
ATAATTTGAATCAATTGAGGCCCTCTTACATCTAAAGATCTCTGGTTGGATGGAATCAACTGTGAGAATTACC
TCAGGAAATAGGAAATCTGAAGAACCCTGCTGTGTTAGATGTCTCTGAACAAGGTTGGAAAGACTTCTGGAAGA
AATCAGTGGCGCTGACTTCATTAAACGATTTAGTCATTTCCCGAACTTATTAGAAACGATTCCGGATGCGCATGG
AAAAC TAAAGAACTGTCAATCTTTGAAGGTGGATCAGAAATAGACTCACACAGTTGCTGGAAGCAGTTGGGGAAATG
TGAAAGCTCTACTGAGTTAGTTCTTACAGAAATCAGCTCTGACCCCTGCCTAAAGCAATGGAAACTTAAAGAA
GTTGAGCAACTTGAATGCAGACAGAAATAAATAGTGTCTTACCAAAGAGGATGTGCTTTTAGAGAAATCAC
ATGATAATAATTATGAAGAAATAATAATACATAAGGGATCAAAATGTCAAAATGCTTTGAAAGACGCATGT
GTTGTTTTTAAAGGTGTGAACCTCTAAATCTGTGAGTATAGAGCCAACCTGGAGGAATTATGTCAAAGAATGATCA
TCAGTAACATTAAAGGAGAGTTGGAAAAGGTGAATTTATAGGATTTTAAATGGGAGAAAGAAAGAGATTGACATTT
TGGGTTTGATATACAGAGAATGGTGACACCAATTGGCAGAAATTGATAATTTGGGAGTTTGACAGAGGAAGTGGAT
GCCTTTGGGTTTGATTTTGAATTTAATGTGAAATTAAGCTCCATCCCAATAGCAATTTGGAATTTATAAAATTTGA
TCTTGATGCAACCATATTTCTGGGCAGAGATTACATTGGGCCATGCTCATGTCTTGGATGAGGTGACAACAACT
GTTCACAAAGGCATACACATAGAGGAAGGTGAATGGGAAGCTAAAGCCAGCTTCCCTAGGACTTTTTTTTGGTTA
GTAGTCTAAGCACGAGAAAATGAGACATCACCATCTGTTGGAGAGTAGCTGTATGGACTGAGAGGCATTAA
TTCTGGCAAGGGAGGTGAAATGACTGACATTGAGGAGGAAGCTTATAGTGGGTCAACCAAGGAGGTGTCTAGTGT
GTTGTTTTTAAAGAAAGGCTTACAATTAGCCAGGCGTGGTGGCGGCGCTGTAGTCCAGCTACTCGGAGGCGTG
AGGCAAGAGAAATTGCCTGAACCCGGGAGGCTAAGGTTGCAGTGAGCCGAGACCAGCCACTGCACTCCAGCCCGG
GTGACAGAGCGAGACTCTATCTCAAAAAAAAAAAAAAAAAAAAAAAAAAATG

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FIGURE 1864

MFHCIPLWRCNRHVESIDKRHCSLVYVP E E I Y R Y A R S L E E L L D A N Q L R E L P E Q F F Q L V K L R K L G L S D N E I Q R L P
P E I A N F M Q L V E L D V S R N E I P E I P E S I S F C K A L Q V A D F S G N P L T R L P E S F P E L Q N L T C L S V N D I S L Q S L P E N I G N L
Y N L A S L E L R E N L T Y L P D S L T Q L R R L E E L D L G N N E I Y N L N Q L E P S Y I

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FIGURE 1865A

CGGTGCTGGAGAAGTTTGCCTCGGGTTCGTGACGCGAGGGTGCGGGCCCCCGGGCGCTGCGCGCCGCTGCC
ATGGCTTTCCCGCAGGAGGACGAAAAGTTACCCGCTCTTCAGCAGGAGTTTCGTCTATCCCAACAGCTTCCGATC
GGCTTCCTGCTGGTGCTCTCGCTCTCATCGGGCTATGTTTCGAGGTCACAGCCAAGACTCCCTTCTATTATT
TTACCTCAGTATAACATTAGCGTGCCCTACAGCAGACAGTAGAGCCGTGCACCTACCACATATGGCCCTAAGGACCTG
GTCAACAATCTTGTTCTACATCTTCATCACCATCATCTTGATGCTGTGGTTTCAGGAGTACATTTAGATAAAATC
AGCAAAAGCGGCTCATCTCTCCAAAGTCAAACACAGCAAGTTCAATGAATCTGAGACAGCTGGTCGCTCTTTCATTT
ACCTCGTGATTGGTGCTTCTACGTGGTGGTGACGGAAGGATACTTAACAAACCAAAGAGCCTCTGGGAAGAC
TACCCGCACTGTGCACCTCCCTTCCAGGTAAGTTTTCCTACCTATGCCAGCTGGCCCTACTGGCTGCACGCACCT
CCTGAGCTATACTTCCAGAAGGTACGGAAGGAGGAAATTCGCCGCCAGCTCCAGTATATTGGCTGTACCTGGTG
CATATAGCTGGAGCATACCTCTTAAACCTGAGCCGCTGGGCGGTGATCTTGCTGCTGCTGCAGTACTCAACTGAG
TTCCTCTTCCACACGGCTAGACTCTCTACTTTGACAGATGAAAACACGAGAAACTGTTTCAGTGCTGGGCTGCT
GTTTTTGGGGTTACCCGCCCTCTTCATCTCACCTTGCCGTGCTGGCCATTGGCTTTGGACTGGCTCGCATGGAA
AACCAGGCATTTGATCCCGAGAAAGGGAACCTCAACACTTTGTTTTGACGGCTCTGCGTGCTGCTGCTGGTGTGT
GCCGCCCAGGCGCTGGCTCATGTGGCGTTCATCCACTCCAGCTGCGGCACTGGCGGGAATACTGGAATGAGCAG
AGTGCAAAGCGGAGGATCCCAGCCACACCCAGACTACCAGCCAGGCTCATCAAGAGGCAATCTGGTTACCATGAA
AATGGATGGTGAAGCAGGAACGGAACCTCCCCACGGACTAAGAACTCAAGTCTCCCTAAGGCCAAAGTGCT
AAGAACAGGAATCCTCTTTGGTGGGGGCCGAGCAGGGGGCAAGGAGCCACAGGCCCCCTCCTGCCTCCTCCTTCT
GCCGTGTGATGCTCCGCTCTCAACACGCCGAAACCTGTCTTGCAATGGGGGGAGGGGGGTTTCGCTTTCTCTTCT
TTGGCTTCTCTTATTCTTCCACAACCACTTCTCAATAAAGCCAAAATCTTTCTCTTCTCCGCCCTCAGGCCAC
CTCCTGTCTCTACTCCTGTCTGTGCTGGCTTTTCTGGAACGCCAGCGGCCCATGGCTGGCACCTTTCTGCTTGC
TCTGTCTTCTGCTTATGGCTGCTGCTTTTCTTTTACTTCTTATTTTACCTTATCTTGAATTTTCTGCTCT
GATTTTTTCAATTGGGAGGGAGACTAAGATTGCGATCCTGTCTCTTCGGTCCCGCCAGGCGCTCCCGCTCAGAAGCT
GGGGCTGGTAGGCCCTTGGTGGTCTCATGTGGATGGGCAAGAGAGCGGCCATCTCGGATCATATCTCTCT
GGTGCTGATTAAGCTGACGAGATAATGATTCAGTTCTGCACTGTACCATCTGTAGGCACAGCAGCCACTGCTGT
TGTAATGCCAAGGCATTGGCTTTGGGACGTGACAACCTCAATCCAGAAGGATGGTGTGAATCGGTTGGGTCCC
GTGACTCGAGCTCTTACCAGTGGCTGGCCGCGGATTGGAAGCCAGCCTGCTGTGCTCTGTGGGGGGGACAGCT
CTTCCCACTGCTTAGAGCGAGAGCAGACAACTGCGCAGCAGGCACCTCCAGAAGGTAATGGTGGCAGAACCC
ACAGTGGAGTGCACTAGGCCCTTCTCCAGCAGTCCCACTGCGCATTGCTTTTCAGCCATTCAACAAGCATCAA
AACCACCAACACAGCACTTCATATACCTGCTGAGATAGGCTGGTCTCACTTCCAGAGCCAGCCAGCCCGCTC
AGGGGCCAAACTTACTACCTTGACTTCATCTCTAGCTGCAGAAACCTAAGTCTCAAGGGCTTCAGCCCCATGCT
GGTCCCTTTGGTGTTTCAGGAGAGGCTCACTTGACCGCTGTTCTATCTGGCCGCCCTTGTGTAGTGTCTTTGGAAAT
GTGCTTTTGTAGCACAACCTACAGATTTTAGACTGCATGAACCACTGACTGAGATGACACTCTCTGGAGTAG
ATGATAGGCGCCTTCTTGCCCTTCCCTCACAGATCTTTCCCTCCCTCCACCTGAAGAGAGAGGCCCTCCAAG
TCCTTTTGTGCTTGTGAGGACTTTTAGAAGGGGCGTTCAGCTTTAAAGCCGGTCTAATTAACGCGCGGAGC
CAGTAGCTTACGCCGTGTTATCTCCAGCACTTTGGGAGGTCGAGGTGGGCAGATCACCTGAGGTTAGGAGTTCAAGA
CCAGCTTGCCCAACATGGTGAACCCCATCTCTACTAAAAATACAAAAATTAGGTGTAGTGGCAGGCACCTGTGA
ATCCAGCACTGCTCGGAGGCTGAGCAGGAGAACTCGCTTGAACCTAGAAGGCGGGAATGGGCTTCTTTCATCAAG
GCAACTCCCCCTTCTCCAAGTCACTTACATCATAGATAAAATTTAGCTTCCAGTAACTAGGAGGATTTGTTTCTTA
ACGCCATTTGGAGGCTCTCATCCCTCTACGATAAGGTTGCAGAAATGGGAAGAGCTACCCGCTGGTGTCTTTGA
TTACCCCTTAGGAAGTGAGACAGTGTTTTGAATAATGTATTTCCCCCATTTCTCCCTCTCTCTCCCTGACACTT
CTCTGGGCTGCACAGCAAAAGCTTTGGTAAAGGGCAGTTTGGTTTCAACACAGCAGACCTGATATGGGATCCCT
TAGCCACTTTAGTCAAACAGCCCTGACAGAGTCTATAATTAGTTAGGTCAGGCCCCCACTTGCCTATTAATCTGCA
ATCGCATGTTTCAGCCAGCAGCTCTCAAGCCACCTCTCTCCCACTTAGAGAACACCCATCTTAGGTGCTCTCC
AGGCTGTGTCAGGCTTTCAGCAGGAGGCTCTCAGTGTGAGTCAGGCTTAAAGTCTTGTAGTGTGCTGATG

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FIGURE 1865B

AGCAGAGCAGCTGAAATCTTGCCATCAAGCAACCTCATTTCTCATGCGCTGTAGGTTTCCATTGCTGTGCCAGG
ACACTTGGTGCCAGAGAGCGCCAACTTCATGTCCCTGTCTCTTGCAGGCTCCCCGTGCTGCCAGTACTTCATG
CCTTGGATTGGTCCACAGCCAGCTGGCCGGGGTCAGCTTAGGCTCTGCTTCCCTAGGAGGGGTGTGCTAAG
GGTTTATTTATGTAAAAAACAACCAAAACCAACCTGAGACCATGAGTGGGGCTGGCATCTTGCCA
GCTCGGGCTTCAGGGATGTTTGGGGGGGGTGGTTAGAGGGTAGTTGTAGGGTACTTTGTACCCCTCCCCCTG
CCACCTCTCCCTGGCAGGTTTATTTACAGCAGAGCCAGTCTGTGGCAGGTTGACACAGACTGTGTGCCAGAGC
TGAAATAATTCCAATTCATCCTATGAGCGTGTGGGGTAGCTTGTCTAATTTTGGCCACTTTGGCTGTTTCTT
CAGTTTTATGCAATCTCTCTGCCCCAAAGTGCCAAGCCATTGTGAAGGCTCTGCCAGACCTCCAAGCTTA
GAGCTCAGCACCATTGCACCAAGAGCAGGAGAAAAAGACGTAAACCTACCCAGCAACTGTGGCCTCTGCAGACGCC
TGCTTAACATAACTTACATTTGTGGGGAAGCCAAAGACACAGCAGGAGGAGAGGGAGGGTGGCGCTGGTGACCAA
GGATCTGTGCTACCCGCTCCCTCCTTGGAGGTGCAGTGATGATGGGAGTTATTTTACCATCCGGCGCTGATA
GCTGCACATTAATAAAATGCAATGTGTCTCTTTGAAGGTAGGGGATGGTTCGGGTGAGAGGGGAGCAGGCTGA
CGCCGCGGGGATCTCGTCTCTCCCTTTTGAAGTCAGTTCTAATCCCATGTGTGTCTGGGCCACCCAGACCGAAAT
GGTTGCTGAGAAACTTGTCTGTTTCATGTCCCAAGGCATAACTTCCCAACATTTAAGAAACCCCAATAGACCCCT
TGCCCTGGCCACGTTCCACAGATCCTCTCTCTGAGCGAAACCCCTGGGACCTTAAGAACCCCTGAAGCTTGGGGTG
GGTGTGCTCTCTGGGCTCTCTTTTGGGACCTCCTTTTGCAGTACCCCTCTTTTCTTAAGCAGCTAATAAGAG
GTTGGGTGAAGAGTGCACTCTCCCTCCAGGATTTCCACAAACAAATTTCTATCTTCCATGGATGCTTTAATGGAA
GTGGGTTGCCGACCCCTTGTGCTAGAAAAAGGCTTCGCTTGGGTTTCTCTTGTATGCTTCAGCCTTCTCATGTT
GGTTTTTCTAGGCCCTGGTGTGAGAGGTAGGGAAGTCTGCACATAACTAATTTCTTTTGCTTAAGGGCCTATGGCAC
AAGTGACAAACTTCAATCTTGATGTTCTAAGCTCTCTCTCTTAACAGAGGGAGTGCTGAAGCTTTTGTAGTCA
AGACAATGGAGTGCTCTCTCTCCCTCACTCTGCCTTCCAGAGCTTATGGTCCCTTCTCAGGAGAGGATTTTCAG
GATTATTTGGAGGATTAGGTCATTGTGCAGATGACTGGAAAACTTAATAGGATCTCTCTCCAGCTCAAGGTTGTCC
CAGTGAGGAAGACTTTACCAACTTCTCACTCTACCCCACTACTACATGATGTTAGCTTCACTTGCATAAGGCT
GAAGACCAAGTTCTCCCAAGTGAAGCTGCCTCATTTCTTTATGGAGTTCCTGGAGTGGCAGAGCTATAAAGACG
AGCATTTGGGATTTGCGAGTCTCCATGTAGCCTTTCGTGCTTGGCAACCCCTGTAGACTTTTGTCCCAAGCAGATT
CGCTGCTGGCCCTGTGTGTGAGAAATAAGTGCTTACTTTTGTGTGGTGTTCACCTTGTACTTCCGTCGGCAGC
CCCCAGTTGCCAGGGCTTCGAGGCCAGCCAAAGCACCATACCTCAGTATAGTTATATATAAAGGGACAGCGATT
GTGACAGTTTACCCCAATTTGTTTCTAACCCCGCTGCCAGGATTAGGGTCTGTGGTGTGTTCTGTTTCTGTTT
GGTTTTCTCCCTTGTGTCAGTTCTCTCTGCCCCAGCTGGGTGGCTGGGAAGTCTGTGAGGTGGGCCAACCAAA
GCATACCTATTAAGAGAAGCCAGAGCTTCCAGCCCACTCTCGAAACCTCTCTCTGGCCCCACATGACCAAT
CCTTCTCGGTTATTTCCCAACCCCAAGTATTTATGATAAAGGTGTTTACTTTTACTTCCAGTCTCCAAGTGCTAACACATA
GCTTCCCATTCAGCCCAAGTTTATATGATAAAGGTGTTTACTTTTACTTCCAGTCTCCAAGTGCTAACACATA
AACACATACATGCTGACTGTTGACAGAACTGTTGAGCTCCTAATTCAGTGTTACCTTGTTTTAGTCCGACAA
CCTCTCCCTACCCCTTGGCCGCCACGTTTTTCTCACTCTCCGGCTTGTGCAATAACTCTCCAGCCAGCTGGT
CCTTTCACAGCCTTCTCTCCCTTAAACACCTGCAACTGGGGGAGAAATGGGACCCATGGGAGGGGAGTCTGT
CATCCCTTACACAAGAAATAGCCACTTCTCTTTTGTGCTATTCTGTGATCTCTGGTGCTTCTGTGGCACTC
TTTTGAACATGTAGCATCATCTTAGAGGCTTATTTTAAAAAATGTGTTGAAGAGAAAAACCATTTCTCACGA
TGGGGCTTAAGTCAATTTGTCAGGAATAAGATTGGCGTGGTGCCCATGACATCACCGCTACTCTGCCTAAAAAGC
TGTAGAGCTACTTGTTCAGCTGGAGGAGGAAGATATTTTGGGAAGCAACAGCCGAGGTGGAGAGCCCTGTTTAC
CTGATAGGGTCTAGCTGTGACAGTAAATATAATACCGCTGTTTCTTGGGTACAGATTTAGTGTTCATGTGATG
AGACTGTAAACCTCATTTTTCGGTTCTCTGTTTAAAAAACAATCTGAAGGAGAACTGAAGCTGCTGTGGCCT
GAGCAACTGATAATGCAATGTGGACAAAGTGCTGTTTTTCTACTCTAGCCTGTTTCATATGGACCAATTTCAAC
AAGGAATCAAGGAAATTTGATCACTGCCGATTTTATGCTTTCATGTAAAAAAGGGTGGGGGGAGGGGTGCTT
TTTGCTTTTGGTGAACTTTTTCACAAATCATTTTCCACTGTTTCTGTCTGGTTTAAAAACAAATTCAGATTT
GTATGGATTTTAAAAATGATACATTTTGAACAAATGATCAAAATTTTCTGAAATTAACATAAAGGCAGAAAAAT

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FIGURE 1866

CGGCACGAGGCGACTTTGGTGGAGGTAGTTCTTTGGCAGCGGGCATGSCGGGTACCGTGGTGTGGACGATGTGG
 AGCTCGGGGAGGCTCAGAGAGATTACCTGGACTTCTTGGACGACGAGGAAGACAGGGAAATTTATCAGAGCAAAAG
 TTCGGGAGCTGATCAGTGACAAACCAATACCGGCTGATTGTCAATGTGAATGTACCTCGCAGGAAGAAACGAGAAGA
 GGGCTAACCGGCTTCTGAACAATGCCTTTGAGGAGCTGGTTGCCITCCAGCGGGCCCTAAAGGATTTTGTGGCCT
 CCATGTGATCTACCTATGCCAAGCAGTATGAGGAGTTCTACGTAGGACTGGAAAGGACGCTTTGGCTCCAAGCAGC
 TCTCCCCGGGACTCTTACCTCCTGCTTCTTCCAGCTGTGTGTCTGTGTGGAGGGCATTTGTCAATAATGTTCTC
 TAGTTCGTCCCAAAGTCTGCTCCGAGTGTCCACTACTGTCTGTCTACTAAGAAGACCATAGAGCGACGTTATTCTG
 ATCTACCCACCTTGGTGGCCTTTCCCTCCAGCTCTGTCTATCTTACCAAGGATGAGGAGAAACAATCCCTCTGAGA
 CAGAAATATGGCCTTTCTGTCTACAAGGATCACCAGACCATCACCAATCCAGGAGATGCCGAGAAGGGCCCAAGCG
 GCCAGCTCCCCGCTCTGTGGACGTCATCTGGATGATGACTTGGTGGATAAAGCAGAACCTGGTGACCGGGTTTC
 AGGTGGTGGGAACCTACCGTTGCCITCTGGAAAGAGGGAGGCTACACCTCTGGGACCTTCAGGACTGTCTCTGA
 TTGCTGTAAATGTTAAGCAGATGAGCAAGGATGCTCAGCCCTCTTTCTCTGTGAGGATATAGCCAAGATCAAGA
 AGTTCAGTAAACCCGATCCAAGGATATCTTTGACAGCTGGCCAAGTCATTGGCCCCAAGTATCCATGGGCATG
 ACTATGTCAAGAAAGCAATCTCTGTCTTGTCTTTGGGAGGGGTGGAACGAGACCTAGAAAATGGCAGCCACATCC
 GTGGGACATCAATATTCTTCTAATAGGAGACCATCCGTTGCCAAGTCTCAGCTTGTGGGATATGTGCTTTGCA
 CTGCACCCGAGCTATCCCCACACTGGCCGGGGCTCTCTGGAGTGGGTCTGACGGCTGCTGTACCCACAGACCC
 AGGAAACAGGAGAGCGCGCTCTGGAAGCAGGGGCCATGGTCTGGCTGACCGAGGCGTGGTTTGCATTGATGAAT
 TTGACAAAATGTCTGACATGATGCGCAGCCATCCATGAAGTATGAGGAGCGGTCGAGTGACCAATTGCCAAGG
 CTGGCATCCATGCTCGGCTGAATGCCCGCTGCAGTGTTTGGCAGCTGCCAACCTGTCTACGGCAGGATGACCC
 AGTATAAGACTCCAATGAGGAACATTGGGCTACAGGACTCACTGCTGTACAGATTGACTTGTCTTCTCATCTGC
 TGGATCAGATGGATCTTGGCAGGATCGGGAGATCTCAGACCATGTCTTGGATGACCGGTATCAGAGCACTGC
 GGGAGCAGGATGGCGATGCTATGCCCTTGGGTAGTGTCTGTGGATATCTTGGCCACAGATGATCCCACTTTAGCC
 AGGAAGATCAGCAGGACACCCAGATTTATGAGAAGCATGACAACCTTCTACATGGGACCAAGAAAGAAAAGGAGA
 AGATGGTGATGTCAGCAATTATGAAGAAGTACATCCATGTGGCCAAAATCATCAAGCTCTGCTTCCACAGGAGT
 CGGCCACCTACATTGCAGAAGATATTACGCCTCGCGACGCCAGATAGCATGAGCTCAGACACCGCCAGGACAT
 CTCCAGTTACAGCCCGAACACTGGAACCTCTGATTGCACTGGCCACAGCCCATGCGAAGCCCGCATGAGCAAGA
 CTGTGGACCTGCAAGATGCGAGAGGAAGCTGTGGAGTTGGTCCAGTATGCTTACTTTAAGAGGTTCTGGGAAGG
 AGAAGAAACGTAAGAAGCGAAGTGAGGATGAATCAGAGACAGAAGATGAAGAGGAGAAAAGCCAGAGGACCAAGG
 AGCAGAAGAGGAAGAGAAGGAAGACTCGCCAGCCAGATGCCAAGATGGGGATTATACAGAACCTTATGACTTCA
 GTGACACAGAGGAGGAATGCCCAAGTACACACTCCAAGACGGCAGACTCACAGGAGACCAGGAATCCAGAG
 AAGTGGAGTTGAGTGAATCCAGGTTGAAGGCATTCAGGTTGGCCCTCTTGGATGTGTTCCGGGAAGCTCATGCGC
 AGTCAATCGGCATGAATCGCCTCACAGAAATCCATACCGGGACAGCAAGAGAGCCCTTCTTCTAGTTGAGATTCC
 AGGCTGCTCTGAGCAAGATGCAGGATGACAAATCAGGTCA TGGTGTCTGAGGGCATCATCTTCTCTCATCTGAGGAG
 GCCTCTGCTCTGAATCTGGGTTGTGTCGAGAGAGTTGTTCTGTGTTTCCACCTCTCCCTGACCCCAAGTCTTT
 GCCTCTACTCCCTTAACAGTGTGTAATCAACTGAAGGCGAGGAATGTTGGTGATGAAGCTGAGTTCAGGACTCG
 GTGGACCTTTGGGAAATGGGTCAATGAAGCTGCCATGGGGTGAGGAAAGAGGAGACAGTGGGAGAGGCAATGAC
 TATTGCACTTCAATGCAAAAGCACTGGCTCATCGCCCTACTTCCCATCCACACAAACCCCAATTGTAATAAC
 ATATGACTTCTGAGTACTTTTGGGGGCAACTGTTTCTGTTTGTGCTTTTTTGTGTTTGTGTTTTTCTCCAG
 AGCACTTTGGTCTAGACTAGGCTTTGGTGGTTCCAATTGGTGGAGAGAAGCTCTGAGGACAGTATGACGAGTCA
 AGAAGCTTCTTTTGCAGTACCAAGTAAAGGTGAATATGATTGTATCAGAAAACAAACCAATATCCAGATG
 AATATCCGAGATGTTGAATAAATTAAGCACTTTCGTACAAAAAAGGGGGGCCGGTAAAC

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FIGURE 1867

MAGTVVLDDELREAQRDYLDFLDDEEDQGIYQSKVRELI SDNQYRLIVNVNDLRRKNEKRANRLNNAFEELVA
FORALKDFVASIDATYAKQYEEFYVGLGSGSKHVSPTLTSCPLSCVVCVEGIVTKCSLVRPKVVRVSVHYCPA
TKKTIERRYSDLTTLVAFPSSSVYPTKDEENPLETEYGLSVYKDHQITI TIQEMPEKAPAGQLPRSDVILDDDL
VDKAKPGDRVQVVGTYRCLPGKKGGYTSCTFRITVLIACNVKQMSKDAQPSFSAEDIAKIKKFSKTRSKDIFDQLA
KSLAPS IHGHDYVKKAILCLLLGGVERDLENGSHIRGDIINILLIGDPSVAKS QLLRYVLC TAPRAIPTTGRGSSG
VGLTAAVTTDQETGERRLEAGAMVLADRGVVC IDEFDKMSDMDRTAIHEVMEQGRVTIAKAGIHARLNARCSVLA
AANPVYGRYDQYKTPMENI GLQDSLRSRFDLLFIMLDQMDPEQDREISDHVLRMHRYRAPGEQDGDAMPLGSAVD
ILATDDPNFSQEDQQDTQIYEKHDNLLHGTKKKKKEMVSAAFMKKYIHVAKIIKPVLTQESATYIAEEYSRLRSQ
DSMSSDARTSPVTARTLETLIRLATAHAKARMSKTVDLQDAEEAVELVQYAYFKKVLEKEKKRKRSEDESETE
DEEEKSQEDQEQKRKRKTRQPDAGDSYDPYDFSDTEEMPQVHTPKTADSQETKESQKVLEESRLKAFKVA
LLDVFREAHQAQSIGMNRLTESINRDSEEPFSSVEIQAALS KMQDDNQVMVSEGIIFLI

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FIGURE 1868

ATGACTGCATCCAACCTCGCAGGTGCGCCAGAACTACCACCAGGACTCAGAGGCCGCCATCAACCGCCAGATCAAC
CTGGAGCTCTACGCCTCCTACTTTAACCTCTCCATGTCTTACTACTTTGACCGTGATGATGCGGCTTTGAAGAAC
TTTGCCAAATACTTTCTTCACCAATCTCATGAGGAGAGGGAGCATGCTGAGAAACTGATGAAACTGCAGAACCAA
CAAGAGTGTGCATTACATTTGGAAAAAATGTGAATCAGTCACCTACTGGAAGTGCACAACTGGCCACTGACAAA
AATGACCCCACTTTGTGTGACTTCATTGAGACACATTACCTGAATGAGCAGAATTGGGTGAACGTGACCAACTTG
CACAAGATGGGAGCACCCGAATCTGGCTTGGCAGAATATCTCTTTGACAAGCACACCTGGGAGAAAGAGGGAGC
ACTGGAATGTTAATTTCGGACAATGCCAATACAAGTTTACAGAGAAGAGAGAAGTTCATTGGGTTTTGAAGGT
TCTGCTGATTTTCAATGGGCAGAGGTTGGAGGAACAGTCTGAGCAGAGAGAATCATATAAACAAGGAGTGAATGT
GAGAAAGGCTTCAGGTCCCATCAGAGTACTGGCTTCACTTTGACTGTAGAAGATTAGTTGAAGCAGTATTCAAA
AGTGTAGAATCTGTCAAGCTACCTATCCAGTCCTCTTGTCTCTGAAACAGTGGTTACCTGCTCTGGAAAACCTT
CTCTCTCCATCCTCCAAAGCTCCTGGGGTACAGCTTTATCAGCGCACCTATCACACTGATTCTGGTCTCCAAAA
CTCTTCTTGTGAAAAACAGCATACAAAATACTTCCCTCTTCAAAGCCCAATACAACTGGAAAAACAATGGAG
AAGAAAGTACTCAGTATCTTTTCCCACTAAAAGTTGTACTGCAATGCTTGAACAACAAGTGGAGGAGCCCTAGGT
TTATCAAAAGTATCTGCCATTCTAAAAGAAATGTGTTTCCAAGGCATCCAGAAAGAGCTCTTCCAACCTGCACCA
AATTCATTGCTTTCCACACCCCTGTCCCGACAAGGGGTGCTGCAGAAGCACAAGGCCAGCCAGATGCATGA

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FIGURE 1869

MTASNSQVRQNYHQDSEAAINRQINLELYASYFNLSMSYFDRDDAALKNFACYFLHQSHREHEAEKMLKLNQ
QECALHLEKNVNQSLLELHKLATDKNDPHLCDFIETHYLNEQNWNVTNLHKMGAPESGLAEYLFDKHTLGERGS
TGMFNSDNANTSLQRRENFPPLGFEGSADFWAEVEEQSEQREHHKQORSECEKGFRSHQSTGFTLTVEDLVEAVFK
SVELVKLP IQSSCLLKQWLPALENLLSPSSKAPGVQLYQRTYHTDSGLQKLFLLKTAYKILSLFKAQYNTGKAME
KKVLSIFSPLKVVQLNTTGGALGLSKVSAISKRMCFQGIQKELFPTAPNSICFPHVPVTRGAAEAQSQPDA

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CGGACGCGTGGGCGGTTACGCCATGGGGAAGCTCTCCGACGACGACACCGCCCTCGCCTCCTGCAACGCCGATCG
CCCCGGGACGACGACGACGATGATCGGGGCTCCCTCTCTGCTGGATCTCTAGCACCCACGACGCTCAGC
CAGACAGAAAGGCGTCGAACTCAATTGCACATACGCCGATGTGACCTGCCACCGCGGAGCTGTAACTGTGTG
ACAAGTGTCCAGCAGGAACCTATGTCTCTGAGACTGTACCAACAGCAAGCGCTGGCGCTCTGCAGAGCTTGCCCTGT
TGGGACCTTTACAGGCTAGGAATGTCATAGAGAAATGCCATGACTGTAGTACGACCTGCCATGGCCAAATGA
TTGAGAAATTAACCTTGTGCTGCGTTGACTGACCGAGAATGCACTTGTCCCACTGGCATGTTCAGTCTAACGCTA
CCGTGTGCCCCATGACGCTGTCTCTGGATGTGGGTTGGGTTGGCGAAGAAAGGACAGAGACTGAGGATGTGCGGT
TGAAAGACTGTGCTCGGGTACTCTTGAGATGTGCGTCTTAGTGTAGTAAGAAATGCAAGCATACACAGACTGT
TGAGTCAGAACTCGTGGTGATCAAGCGGGGACCAAGGACAGACAGACGCTCTGTGGCAGCATCCCGTCTCTCT
CCAGCTCCACCTCACTTCCCTGGCAGCAGCCATCTTTCACGCGCTGAGCAGATGAAACCCATGAAGTCCCTT
CTCCACTATGTGTTCCAAAGGCATGAATCAACAGAAATCAAGCTCTTGTGCTCTGTATAGCAAAAGGATCTGA
GTAGCATCTCAGGAAGGACGATCCCTGCAACACAGCTCAGCAGGGGGAAGGAAGCTGAACAGCAAGACCTCC
CAAACTTCAGGTAGTCAACCCAGCAGGCGCCACACAGACATCACTGAAGCTGTGCGCTCTGAGGAG
CCACTGGGGGCGAGAAGTCCAGCAGCGCCATCAAGGGCCCCAAGAGGGGACATCTTAGCAAGAACTTACAGC
ATTTTGACATCAATGAGCAATTTGCGCTGGATGATGTGCTTTTCTCGCTGTGTGCTGTGTGTTGTTGTTG
CGAGTATCGGAAAGCTCGAGGACTGTGAAGAAAGGCGCCCGGACGATCCAGTGCCATGTGTGAAAGGCGAG
GGCTGAAGAAATTCATGATCTCACTCCCGAAGACGGGAGAAATGATGATCTACTACTGCAATGGCCATGTGAT
TCTCGAAGCTGTAGCGACCGCAAGTGGGAGGCACTGGAAGATATCTACGTTCTTTTGCAATGGCAGTGAGA
GGGAGGTTGCTGCTTTCTCCAATGGGTACACAGCCGACGACGAGCGGGCTACGAGCTCTGACGACTTGCAGCA
CTCGGGCGCGGAGGCGACGCTCGCCAGCTAATTATGCGCCCTGCGCGACGCGGGAAGCAAGCTGTGTGGAGA
AGATTGCTGGGCTGAGAAGAACACCCAGCTGGAAGATGCAAACTAGCTCTCCGATGAGCCACCGCCGCG
TTAGCCCGAGCCCATCCCGACCCCAACGCGAAACTGGAAGATTCGCGCTCTCTGACGGTGGAGCTTCCCCAC
AGGACAAGAAACAGGGCTTTCTGTGGATGAGTCSGAGGCCCTTCCGCTGTGACTTCATCTACACGCGCTCT
CGCGCTGAGCAGGAAGCGTTCTTTATTACCAAGAAAGAAAGGACAGCAAGTTGTGGCGAGGTACGCTTGACC
CTGTGACTTGACCTCACTTTGATGACATGCTCACTTTTAAATCTGAGGAGCTCGGGGTGATGAAGAGA
TTCGCGAGCTGAGGACAAACTGACGCGCTATTGCAAAATTTGAGATCGAAGCGCAGGAAGCGACCGACGCC
TCTGTAGCTCTGTTTATAGCCATCTTCTGACTGCTGTAGAACATAGGGATACGATCTTGAGAAATTACTCAA
TTTATGTGGCAGGGTGGTTTTTAATTTCTCTTGTGTTTCTGATTTTGTGTTGGGCTGTGTGTGTGTTCTG
TGT
CTCTCTTTTTTTTAAATAACTCTTCGGGAAGTGTGTTTATAGCCCTTGCCAGGTGTAACTGTGTGAATA
CCACCATCAAAAGTTTTAAGTTCATATTTTCTCCATTTGCGCTCTTATGTATTTTCAAGATATTCTGTGCG
ACTTTAAATTTACTTAACCTACCATAAATGCAGTGTGACTTTTCCACACACTGGATGTGAGGCTCTTAACCT
TTAAAGTATTAATGGCATCTGTGTAATCTTATAGGCACTTTATGCTCTTAACATCTACCACTTCTTTAA
ACAAATATTATTACTATTTTATTGTGTGTGCTTTATAAATTTCTTAAAGATTAAAGAAATTAAGAGCC
CATGTGATTACTGTATGTAACAAATCAACTTTGATTACTCTTTAAATATGTTCTGTATGATCATATCATGGCTG
AAACTTGACCACATATTGCTGATTTGTAGTTTTCACATGCGACCGGTGTAGAATGCTGATTACTGTACTCT
TCTTATGCTAATATGCTCTGGGCTGGAGAAATGAAATCCTCAAGCACTCAGGATTTGCTATTTAAGTGGCTGAC
AAGTGGGCGCCCAAGAGACTGGAATCTCACTTTTAGGATTTAGCTGTCTGGAACACATCTGTCAGCTTGGA
AAGTCAAAATCAAGTGCAGTGGCGGCCCTTTCATAGAGAAATTTGCCAGCTTTGCTTTAAAGAGTGTCTGTT
TTTATATACACATAATCAATAGGTCCAATCTGCTCTCAAGGCTTTGGTCTGGTGGGATCTCTCAACCAATAT
TTAATTTAAATGGCTGCACTGTAAAGACCTTGTGTGATTTGTGCAATCTGCTCCCAATGCAATAATGTAC
CTCTTAATGCTCAAGTGGCAGGTCCCAATGCAAGAGTGGGCTGAGCTCCCTTTGTGGGTGGGTTGTGGGTA
GTGGTGAAGGACCGATACAGAAAATGCGCTCAAGTGTACTAATTTATTAATAAACATTAGGTGTTGTGTA
AAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1871

MGTSPPSSSTALASCRIARRATATMIAGSLLLLGFLSTTTAQPEQKASNLIQTYRHVDRATGQVLTCDKCPAGTY
VSEHCINTSLRVCSSCPVGTTRHENGIEKCHDCSQPCPWPMIEKLPCAALTDRECTCPPGMFQSNATCAPHTVC
PVGWGVRRKGTETEDVRCKQCARGTFSQVPSVVMKCKAYTDCLSQLVVIKPGTKETDNVCGTLPFSFSSSTSPSP
GTAIFFRPEHMETHEVPSSITYVPGKMNSTESNSSASVRPKVLSIQEGTVPDNTSSARGKEDVNKTLPLNLQVNVH
QQGPHRRHILKLLPSMEATGGEEKSSTPIKGPKRGHPRQNLHKKHFDINEHLPWMIVLFLLLVLVVIIVVCSIRKSSR
TLKKGPRQDPSAIVEKAGLKKSMPTQNREKWIYYCNGHGIDILKLVAQVGSQWKDIYQFLCNASEREVAAFSN
GYTADHERAYAALQHWIIRGPEASLAQLISALRQHRNDVVEKIRGLMEDTTQLETDKLALPMSPSPSPSPSPSP
PNAKLENSALLTVEFSPQDKNKGFFVDESEFLRCOSTSSGSSALSRNGSFITKEKKDTVLQVRLDPCDLQPIF
DDMLHFLNPEELRVIEEIPQAEDKLDRLFEIIGVKSQEASQTLLDSVYSHLPDLL

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FIGURE 1872

GC GCGGCAC T TCCGCTGGCCGCTGGCTCGCTGGCCGCTCCTGGAGCGCGCGCGGAGCGCAGGGGGCGCGCGGC
CCGGGGACTCGCATTTCCCGGTTCCCTCCACCCACGCGGCTTGGACCATGAGACGCCAGATGGTGGGCAGTGG
TGGTGCTGGCTCGCTTCCCTCCCTAGGGGCAAGTGGGGAGACTCCGAAAGCCCTCCGGAGTCATGACCCAGC
TATGGTTCTTCCGATTGTGGTGAATGCTGCTGGCTATGCCAGCTTTATGGTACCTGGCTACCTCCTGGTGCAGT
ACTTCAGGCGGAAGAATACTACCTGGAGACCGGTAGGGGCTCTGCTTTCCCTGGTGAAGCTTGTGTGTTGGCA
ATGAGCCCAAGGCTCTGATGAGTTCCCTGGCGCCCGAACAGAGGCGGCAGAGACCAACCCGATGTGGCAGG
CCCTGAAGCTGCTCTTCTGTGCCACAGGGCTCCAGGTGCTTATCTGACTTGGGGTGTGCTGCAGGAAGAGTGA
TGACCCGCGAGCTATGGGGCCACAGCCACATCACCGGGTGAGCGCTTTACGGACTCGCAGTTCCTGGTGCTAATGA
ACCGAGTGCTGGCACTGATTGTGGCTGGCCCTCCTGTGTTCTCTGCAAGCAGCCCCGGCATGGGGCACCCATGT
ACCGGTACTCCTTTGCCAGCCTGTCCAATGTGCTTAGCAGCTGGTGCCAATACGAAGCTCTTAAGTTGCTCAGCT
TCCCAACCCAGGTGCTGGCCAAGGCTCTAAGGTGATCCCTGTGCTGCTGATGGGAAGCTTGTGCTCGGCGCA
GCTACGAACACTGGGAGTACCTGACAGCCACCCCTACTCCATTGGGGTCAGCATGTTTCTGCTATCCAGCGGAC
CAGAGCCCCGAGCTCCCCAGCCACACACTCTCAGGCCCTCATCTTACTGGCAGGTTATATTGCTTTTGACAGCT
TCACCTCAAACCTGGCAGGATGCCCTGTTTGCCTATAAGATGTCATCGGTGCAGATGATGTTTGGGGTCAATTTCT
TCTCCTGCCTCTTACAGTGGGCTACTGCTAGAACAGGGGGCCCTACTGGAGGGAAACCCGCTTCATGGGCGCAC
ACAGTGAGTTTGTGCCCATGCCCTGCTACTCTCCATCTGCTCCGCATGTGGCAGCTCTTCATCTTTTACACCA
TTGGGCGAGTTTGGGGTCCCGTCTTACCATCATCATGACCTCCGCCAGGCTTTGCCATCTTCTTTCTGCGC
TTCTCTATGGCCACACTGTCACTGTGGTGGGAGGGCTGGGGTGGCTGTGGTCTTTGCTGCCCTCCTGCTCAGAG
TCTACGCGCGGGGCGCTCAAAGCAACGGGGAAAGAAAGGCTGTGCTGTTGAGTCTCCTGTGCAGAAAGTTTGGAG
GGTGAAAGGGCTGAGGGGTGAAGTGAATAAGACCCTCCACCATCCCTCTCTGCTGTAACCTCTGAGGGAGC
TGGCTGAAGGGCAAAATGCAGGTGTTTTCTCAGTATCACAGACCAGCTCTGCAGCAGGGGATTGGGGAGCCAG
GAGGCAGCTTCCCTTTTGGCTTAAGTCAACCATCTTCCAGTAAGCAGTTTATCTGAGCCCCGGGGTAGACAG
TCCTCAGTGAGGGGTTTTGGGGAGTTTGGGGTCAAGAGAGCATAGGTAGGTTCCAGTTACTCTTCCACAAGTTC
CCTTAAGTCTTGCCCTAGCTGTGCTCTGCCACCTTCCAGACTCACTCCCTCTGCAAAATACCTGCAATTTCTTACC
CTGGTGAGAAAACCAAGCGGTGTAGGCTCCAATGCTGCTTTCCAGGAGGGTGAAGATGGTGTGCTGTGCTGAGG
AAAGGGGATGCAGAGCCCTGCCAGCACCACCACTCCTATGCTCCTGGATCCCTGCTGCTTCCATGAGCCT
GTTGCGAGTTTTGGTACTTTAGAAATGTAACTTTTTGGCTCTTATAATTTTATTTTATTAATAATTAATTAAGTGA

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FIGURE 1873

MDARWWAVVVLAAFP SLGAGGETPEAPPESWTQLWFFRFVVNAAGYASF MVPGYLLVQYFRKKNYLETGRGLCFP
LVKACVFGNEPKASDEVPLAPRTEAAETTPMWQALKLLFCATGLQVSYLTWGV LQERVMTRSYGATATSPGERFT
DSQFLVLMNRVLALIVAGLSCVLCKQPRHGAPMYRYSFASLSNVLSWCQYEALKFVSFP TQVLAKASKVIPVML
MGKLVSRRSYEHWEYLTATLISIGVSMFLSSGPEPRSSPATL SGLILLAGYIAFDSFTSNWQDALFAYKMSSV
QMMFGVNFSCFLT VGSLL EQGALLEGTRFMGRHSEFAAHALLSICSACGQLFI FYTIGQFGAAVFTIIMTLRQ
AFAILLSCLLYGHTVT VVGG LGVAVVFAALLLRVYARGRLKQRGKKAVPVESFPVQKV

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FIGURE 1874

CTCCGGCGCAGTGTTGGGACTGCTCTGGGTATCGGAAAGCAAGCCTACGTTGCTCACTATTACGTATAATCCTTTT
CTTTTCAAGATGCTGAGGAAGTGCACCATGGAGAGGAGGAGGTGGAGACTTTTGCTTTTCAGGCAGAAATGCC
CAACTCATGTCCCTCATCATCAATACCTTCTATTCCAAAGGAGATTTCCTTCGGGAGTTGATCTCTAATGCT
TCTGATGCCITGGACAAGATTCCGTATGAGAGCCTGACAGACCTTCGAAGTTGGACAGTGGTAAAGAGCTGAAA
ATTGACATCATCCCCAACCTCAGGAACGTACCCTGACTTTGGTAGACACAGGCATTGGCATGACCAAAAGCTGAT
CTTCTAAATTAATTTGGGAACCATTTGCCAAGCTCTGGTACTAAAGCATTTCATGGAGGCTCTTCAGGCTGGTGACAG
ATCTCCATGATTGGGCAGTTTGGTGTGGCTTTTATTCTGCCTACTTTGGTGGCAGAGAAAGTGGTTGTGATCACA
AAGCACACCATGATGAACAGTATGCTTGGGAGTCTTCTGCTGGAGGTTCTTCACTGTGCGTGCTGACCATGGT
GAGCCCATTTGGCAGGGGTACCAAAGTGATCCTCCATCTTAAAGAAGATCAGACAGAGTACTAGAAGAGAGGGCGG
GTCAAAGAAGTAGTGAAGAAGCATTCTCAGTTTCATAGGCTATCCCATCACCTTTTATTGGAGAAGGAACGAGAG
AAGGAAATTAGTGATGATGAGGCAGAGGAAGAGAAAGGTGAGAAAGAAGAGGAAGATAAAGATGATGAAGAAAA
CCCAAGATCGAAGATGTGGGTTAGATGAGGAGGATGACAGCGGTAAAGATAAGAAGAAGAAAACTAAGAAGATC
AAAGAGAAATACATTGATCAGGAAGAACTAAACAAGACCAAGCCTATTGGACCAAGAACCTGATGACATCACC
CAAGAGGAGTATGGAGAATTCTACAAGAGCCTCACTAATGACTGGGAAGACCCTTTGGCAGTCAAGCACTTTTCT
GTAGAAGGTGAGTTGGAATTCAGGGCATTGCTATTATTCTCGTCGGGCTCCCTTTTGAGCTTTTGTAGAACAAG
AAGAAAAGAAACAACATCAAACTCTATGTCGCGCTGTGTTTCATCATGGACAGCTGTGATGAGTTGATACCAAG
TATCTCAATTTTATCCGTGGTGTGGTTGACTCTGAGGATCTGCGCCTGAACATCTCCCGAGAAATGCTCCAGCAG
AGCAAAATCTTGAAGTCATTGCAAAAACATTGTTAAGAAGTGCCCTGAGCTCTTCTGAGCTGGCAGGACAGAC
AAGGAGAATTACAAGAAATCTATGAGGCATTCTCTAAAAATCTCAAGCTTGGAAATCCACGAAGACTCCACTAAC
CGCCGCGCCTGTCTGAGCTGCTGCGCTATCATACCTCCAGTCTGGAGATGAGATGACATCTCTGTGAGAGTAT
GTTTCTCGCATGAAGGAGACACAGAAGTCCATCTATTACATCACTGGTGAGAGCAAGAGCAGGTGGCCCACTCA
GCTTTTGTGGAGCGAGTCCGGAACGGGCTTCGAGGTGGTATATATGACCCGAGCCCATTTGACGAGTACTGTGTG
CAGCAGCTCAAGGAATTTGATGGGAAGAGCCTGGTCTCAGTTACCAAGGAGGGTCTGGAGCTGCCTGAGGATGAG
GAGGAGAAGAAGAAGATGGAAGAGAGCAAGGCAAGTTTGAGAACCTTGCAAGCTCATGAAGAATACTTTAGAT
AAGAAGGTTGAGAAGGTGACAACTCTCCAATAGACTTGTGCTCTCACCTTGCTGCATTTGTGACCAGCACCTACGCC
TGACAGCCCAATATGGAGCGGATCATGAAGGCCAGGCACCTTCGGGACAACTCCACCATGGGCTATATGATGGCC
AAAAAGCACCTGGAGATCAACCTTGACCACCCCATTTGTGGAGACGCTGCGGCAGAAAGGCTGAGGCCGACAGAAT
GATAAGGCAGTTAAGGACCTGGTGGTGTGCTGTTTGAACCGCCCTGCTATCTTCTGGCTTTTCCCTTGAGGAT
CCCCAGCCCACTCCAACCGCATCTATCGCATGATCAAGCTAGGTCTAGGTATTGATGAAGATGAAGTGGCAGCA
GAGGAACCAATGCTGAGTCTCTGATGAGATCCCCCTCTCGAGGGCGATGAGGATGCGCTCTCGCATGGAAGAA
GTGATTTAGGTAGGATCTATAGTTGGAATACTTGTGCCCTTGATAGTGTCCCATGGGCTCCCATGGCTCAGGCC
TCGAGTGGCCCTGTGCCACCTGGCTCCCCCTGTGGTGTCTAGTGTTTTTCCTCTCTCTGTCTGTGTGTTGAA
GGCAGTAAACTAAGGGTGTCAAGCCCATTCCTCTCTACTCTTGACAGCAGGATGGATGTTGTGTATTTGGT
TTATTTTATTTCCTCATTTTGTCTGAAATTAAGTATGCAAAATAAAGATATGCGCTTTAAAAAATAAAAAA
AAAAAAAAAAAAAAAA

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FIGURE 1875

MP EEVHHGEEEVETFAFQAEIAQIMSLIINTFYSNKEIFLRELISNASDALDKIRYESLTDP SKLDSGKELKIDI
IPNPQERTLLVD TGIGMTKADLINNLGTIAKSGTKAFMEALQAGADISMI GQFGVGFYSAYLVAEKVVVITKHN
DDEQYAWESSAGGSFTVRADHGEPIGRGTKVILHLKEDQTEYLEERRVKEVVKKHSQFIGYPITLYLEKEREKEI
SDDEAE EEEKGEKEEEDKDDEEKPIEDVGSDEEDDSGDKKKKTKKIKEKYIDQEELNKT KPIWTRNPDDITQEE
YGEFYKSLTNDWEDHLAVKHFSVEGQLEFRALLFIPRRAPFDLFENKKKKNNIKLYVRRVFIMDSCDELIP EYLN
FIRGVVDS EDLPLNISREMLQQSKILKVIRKNIVKKCLELFS ELAEDKENYKKFY EAF SKNLKLG IHEDSTNRRR
LSELRLYHTSQSGDEMTSLSEYVSRMKETQKSIYYITGESKEQVANS AFVERVRKRGEFVVYMT EPIDEYCVQQL
KEFDGKSLSVTKEGLELPEDEEEKKMEESKAKFENLCKLMKEILDKKVEKVTISNRLVSSPCCIVISTYGWTA
NMERIMQAQLRDNSTMGYMMAKKHLEINPDHPIVETLRQKAEADKNDKAVKDLVLLLFETALLSSGFSLED PQT
HSNRIYRMIKLGLGIDEVEVAEEPNAAVPDEIPPLEGDE DASMEEVD

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FIGURE 1876

GGGCTGCGCTCTCCAGCTGTGGCTATGGCCCCAGCCCCGAGATGAGGAGGGAGAGAAGTAGGGGCCCGCAGGCCT
GGGAATTTCCGTCCCCACCAAGTCCGGATGCTCACTCCAAAGTCTCAGCAGGCCCTTGAGGGAGGGAGCTGTCA
GCCAGGGAAAACCGAGAACCAATCACCATGACAACCACTCACCAGCCTCAGGACAGATACAAAGCTGTCTGGCT
TATCTTCTCATGCTGGGTCTGGGAACGCTGCTCCCGTGGAAATTTTTTCATGACGGCCACTCAGTATTTACAAA
CGCCTGGACATGTCCCAGAAATGTGCTTGGTCACTGCTGAACAGGACGCCAGGCGCTCAGCCGCC
TGCAGCACCTTTGCCGTAGCGGGAACCTCTCAGTGCCATCTTCAACAATGTCATGACCCATATGTGCCATGCTGCC
CCTGCTGTTATTCACCTACCTCAACTCCTTCTGCATCAGAGGATCCCCAGTCCGTACGGATCCTGGGCAGCCT
GGTGGCCATCCTGCTGGTGTCTCTGATCACTGCCATCCTGGTGAAGGTGCAGCTGGATGCTCTGCCCTTCTTTGT
CATCACCATGATCAAGATCGTGCTCATTAAATTCATTTGGTGCCATCCTGCAGGGCAGCCTGTTGGTCTGGCTGG
CCTTCTGCCTGCCAGCTACACGGCCCCCATCATGAGTGGCCAGGGCCTAGCAGGCTTCTTTGCCCTCCGTGGCCAT
GATCTGCGCTATTGCGAGTGCTCGGAGCTATCAGAAAGTGCTTCCGGCTACTTTATCAGAGCTGTGCTGTTAT
CATTTTGACCATCATCTGTTACCTGGGCCTGCCCGCCTGGAATTTCTACCGCTACTACACGAGCTCAAGCTTGA
AGGACCCGGGAGCAGGAGACCAAGTTGGACCTCATAGCAAAGGAGAGGAGCCAGAGCAGGCAAAGAGGAATC
TGGAGTTTCAGTCTCCAACCTCTCAGCCCCCAATGAAGCCACTCTATCAAAGCCATCCTGAAAATATCTCAGT
CCTGGCTTTCTCTGCTGCTTCATCTTCACTATCACCATTGGGATGTTTCCAGCCGTGACTGTTGAGGTCAAGTC
CAGCATCGCAGGCAGCAGCACTGGGAACGTTACTTCAATTCCTGTGCTGTTTCTTGACTTTCAATATCTTTGA
CTGGTTGGGCGGAGCCTCAGACGTGATTATGTGSCCTGGGAAGGACAGCCGCTGGCTGCCAAGCCTGGTGTCT
GGCCCGGCTGGTGTGTCGCCATGCTGCTGCTGTGCAACATTAAGCCCCGCGCTAGCTGACTGTGGTCTTCGA
GCACATGSCCTGGTTTCATCTTCTCATGGCTGCCCTTCCCTTCTCCAAGCGCTACCTCGCCAGCCTCTGCATGTG
CTTGGGCCCCAAGAAAGTGAAGCCAGCTGAGGCAGAGACCGCAGGAGCCATCATGGCTTCTTCTGTGCTCGGG
TCTGGCACTGGGGCTGTTTTCTCTTCTGTTCCGGGCAATTGTGTGACAAAGGATGGACAGAAGGACTGCCCTG
CCTCCCTCCCTGTCTGCTCCTGCCCCCTTCTTCTGCCAGGGGTGATCCTGAGTGGTCTGGCGGTTTTTCTTCT
AACTGACTTCTGCTTTCCACGGCGTGCTGCTGGGCCGGATCTCCAGGCCCTGGGAGGGAGCCTCTGGACGGACA
GTGGGGACATTGTGGGTTTGGGGCTCAGAGTCGAGGGACGGGTGTAGCCTCGGCATTTGCTTGAGTTTCTCCAC
TCTTGGCTCTGACTGATCCCTGCTTGTGACGGCCAGTGGAGGCTCTTGGGCTTGAGAAACAGCTGTGCTCTGTG
TATGTGCTCTGTGCTCGCTCGGTGCTGCTGACAGCTGTCTGCCGTGCTGGGCTGGCTAGGAGCTGGGCTGAC
CGTTGTATGGTTTGACCTGATATATCTCCATTCTCCCTGCGCCTCCTCTCTGTGTTCTCTCATATGCTCCCTCC
CAACTCCCATGCCCAGTCTTTACCCATCATGCACCTGTACAGTGGCCAGTTACTGCCTTTTTAAAAATATA
TTTGACAGAAACAGGTGCTTTCAGAGGCTCTCTGATTTAAATAAACCTTTCTGTTTTTTTT

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FIGURE 1877

CACATGCTGCACGCGCATCTCGCCCCAGGGGCACTGCCTGGAAGATTGAGAGCCTGGGCGGCCCTTCGCTTACT
CTCACCTGCTTCTGAGTTGCCAGGAGACCACTGGCAGATGTCCCGCGAAGAGAAGAGACACATTGTTGGAAGA
AGCAGCCCATGACAGCTCCCCCTCCCTGGGACTCGCCCTCATCCTCTTCTGCTCCCTTCCCTGGGGTGACGCTA
AAAGGACCTATGTCTCACACCATTGAAACCACTAGTTCTGTCCCCCAGGAGACCTGGTTGTGTGTGTGTGAGT
GGTTGACCTTCCCTCCATCCCCCTGGTCCTTCCCTTCCCTTCCCGAGGCACAGAGACAGGGCAGGATCCACGTGC
CCATTGTGGAGGCAGAGAAAAGAGAAAGTGTTTTATATACGGTACTTATTTAATATCCCTTTTAAATTAGAAATT
AAAACAGTTAATTTAATTAAAGAGTAGGGTTTTTTTTCAGTATTCTTGGTTAATATTTAATTCAACTATTTATG
AGATGTATCTTTTGCTCTCTCTTGCTCTCTTATTGTACGGTTTTTGTATATTTGAACAGATATTTAATTTTGC
TAACACTCAGCTCTGCCCTCCCGATCCCTGGCTCCCAGCACACATTCCCTTTGAAATAAGGTTTCAATATACA
TCTACATACTATATATATATTGGCAACTTGTAATTTGTGTATATATATATATATA

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FIGURE 1878

GCGCGAGCCGCGCCGGCCCCGGTCGGGCCTCCGAAACCATGAACCTTCTGCTGTCTTGGGTGCATTGGAGCCTTG
CCTTGCTGCTCTACCTCCACCATGCCAAGTGGTCCCAGGCTGCACCCATGGCAGAAGGAGGAGGGCAGAATCATC
ACGAAGTGGTGAAGITCATGGATGTCTATCAGCGCAGCTACTGCCATCCAATCGAGACCCCTGGTGGACATCTTCC
AGGAGTACCCTGATGAGATCGAGTACATCTTCAAGCCATCCTGTGTGCCCTGATGCGATGCGGGGGCTGCTGCA
ATGACGAGGGCCTGGAGTGTGTGCCCACTGAGGAGTCCAACATCACCATGCAGATTATGCGGATCAAACTCACC
AAGGCCAGCACATAGGAGAGATGAGCTTCTACAGCACAAACAAATGTGAATGCAGACCAAAGAAAGATAGAGCAA
GACAAGAAAAAAATCAGTTTCGAGGAAAGGGAAAGGGGCAAAAACGAAAGCGCAAGAAATCCCGGTATAAGTCCT
GGAGCGTGTAAGTGGTGCCCGCTGCTGTCTAATGCCCTGGAGCCTCCCTGGCCCCCATCCCTGTGGGCCTTGCT
CAGAGCGGAGAAAGCATTTGTTTGTACAAGATCCGCAGACGTGTAATGTTCTCTGCAAAAACACAGACTCGCGTT
GCAAGCGCAGGCAGCTTGAGTTAAACGAACGTACTTGACAGATGTGACAAGCCGAGGCGGTGAGCCGGGCAGGAGG
AAGGAGCCTCCCTCAGGGTTTCGGGAACCATCT

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FIGURE 1879

TACCCCTTCATGCTCCAGTGCACCCAGGCTTCGTGGCCAGCCTGGGAACTGTCTCTACCCCTGGTCTCCCTTCA
GATCAGCTTCTAGAAAATGTTTTGTGGCTACAGTGGCAGCACTGTTTTTCCATGATGCAAGCAGTTTGGCCCTCTT
GGCGGGGGTTATCAGTGGCTGGCAGGGCTGGCACAGCGTGTCCGCCACTGCCACCTGTGGGTTCCAGAGAGGGCC
CAGCCCCGTGTCTGATGCCACCACCTTCTCAGCTCATGTCTGGGGAAGAGGACTGGCAGGGGGAAAGGTGCCTC
CTCCTGAAAGGTGCTCTCTGTTTTTGGCTAATATAGGCTTGGGAACACTTTGATGTCACTAATTCTGACTCC
TTTACTTACTAGCTGTGCGGCCCTTGGGGCAACTTACTTAGCCTCTTTGAGCCTCCTGTTCCCCATCTGTAAAATG
GAATCTCAATAGTGTCTAATAGTAGCATTGTGGAGAAACTTGTGTGAAATGATAGCTGTGGACTACTGTACACAGT
ACTCAGGATGTAGTAAGTGCTCAATAAACAGCTGTTGGTATGTTGACGTTATGGTAGTGGTTGTGGGAGGACG
TAGGAAACTGGAGACTAGCTTGGCAAAGCTGGCTCTTCTCCTTTTAGGGAAAGCTTAGAGCATCCCATGGGGT
ATACCCATACTCAGACTGTCTCTGGCATCGAGGTTGGCCAGGATTCACTTCACTGGAATGAAAACAGGCCCTCAC
GATCAGATGTGGCAGGCCATGTCCCTTGGAACTTGAGTACATCGTGTGATCTCTGGAATGAAAACAGGCCCTCAC
CAGTGTGTGATGGTGGAAAGCTTAGGGAAGTGCTTCAAACACAGTAGGAGGGGACTTACGTTAGATTTTGGAAAGGAC
TTGGCTGATTCGGAAGCTCCAAGAGTGGCATTACAGAGCTGGGTGGAGAGAGGGGCTAGCCATCTTTGTGTGCG
CCCACCGGGCTCATGTGTCTCATCGCCTCTCATGCACTGGTGAAGTTGATGGATGTCTATCAGCGCAGCTACTGCCA
TCCAATCGAGACCCCTGGTGGACATCTTCCAGGAGTACCCTGATGAGATCGAGTACATCTTCAAGCCATCCTGTGT
GCCCTGATGCGATGCGGGGGCTGTGCAATGACGAGGGCCTGGAGTGTGTGCCCACTGAGGAGGAGTATGGTGGGGT
CATGCAAGTGGGCATCTTTGGGAAGTGGGGCAAGGGGGGATAGGAGGGGGGTAACACTTTGGGAACAGGTGGT
CCCAGGTCTGTTTTCTGGCTAGATTTGGCCTTGTCTGGCTCCTGCCCTGAGTGTGCAAGGGGAGGTATGGTGGGGT
CTTGGCTTCTGTGGAGAAGATGCTTCATTCCAGCCAGGTTCCAGCAAGCCCCAACCATCTCCTTCTCCCTGA
TGGTGTGCCATGGGCTCAGGAGGGGACAGATGGATGCTGTGTGAGGAGCCCTCTCTCCTCTCTTGGAGAGAG
TCCTGAGTGCCTCCCTCTTCTGGGGCTTTGTTTGGGAAGCTGGATGAGCCTGGTCCATGGAGAGTTTAAAAAGT
CTTTTGGTGTACCTGGTAATGGGGCACATCTCAGCCAGATAGGGTGGGAGGGAGCTGTGAAACACAGGGAGGG
GGTTGCTTTCGGGTATCTACTAGGAGTCAGGGTGAAGCCTAGAGAGGATGAAAGAGGGGAGGGATGGGGAGTG
GTAAGAACCTAGGATTGAATTCAGCCCTGGCCAACCTTGCAGCCATGTCTTGGCCTCAAGTGGAAACAAGGCC
TCCTTGAAGGCAGCAGGGTTGGGGAGTGGGGTGGGCTGAGCCTCTTCTGCTAGAGCTCTTGGTCTCCTCT
GCCTCCACCACCATCCCTGCTCTGCAGAACCCCTGGGTGCTGAGTGGCAGGAGCCCCAGGGTTGTCCCATCTGG
GTATGGCTGGCTGGGTCACTAACCTCTGTGATCTGCTTCTCTCTTCCAGATTATGCGGATCAAACTCACC
GGCCAGCACATAGGAGAGATGAGCTTCTCAGCACAACAATGTGAATGCAAGTGAGGATGTAGTACGGATT
ATTATCAGCAAGTGGCTGCAGGGTGGCTGATCTGTGCCAGGGTTAAGCATGTGTACTTTTGGCCCCCTCCAG
CTTCCCGCTATGTGACCTTTGGCATTCTTCAATGTGCCTCAGTTTCTACATCTGTAAAAATGGGCACAAATG
AGTATACTTCATAGCATTGTTATAATGATTAAACAAGTTATATATGAAAAGATTTAAACAAGTGTGCTCCAT

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FIGURE 1880

AGGTTTTTGAAGATGCGGCCCTCAAGGCTCTGGTGTCGGCTGTGGGGGCTTCTCCGTGGGCTACTAGCGGGC
CCGGCAGCGACCAGCTGGTCTCGGCTTCCAGCTCGCGGGTTCAGGGAAGTGGTGGAGACCCAAGAAGGGAAGACA
ACTATAATTGAAGGCCGTATCACAGCGACTCCAAGGAGAGTCCAAATCCTCCTAACCCCTCTGGCCAGTGCCCC
ATCTGCGGTGGAACCTGAAGCACAAGTATAACTATGACGATGTTCTGCTGCTTAGCCAGTTCATCGGCCCTCAT
GGAGGCATGTCGCCCGAAAGATCACAGGCCTATGCCAGGAAGAACACGCAAGATCGAGGAGTGTGTGAAGATG
GCCACCGAGCAGGTCTATTACCAATCACAGGCCTCGGCTTCTTGAAGGAGTTGTTCGGAAGAGCAACCCCAA
CTCAACCGGTACCTGACGCGCTGGGCTCCTGGCTCCGTCAAGCCCATCTACAAAAAGGCCCCCGCTGGAACAGG
GTGCGCATGCCCGTGGGGTCACCCCTTCTGAGGGACAATGTCTGCTACTCAAGAACACCTTGGAAAGCTGTATCAC
TGACAGAGAGCAGTGCTTCCAGAGTTCCTCTGCACCTGTGCTGGGGAGTAGGAGGCCACTCACAGCCCTTGG
CCACAACATACTCCTGTCCACCCCAACCGATGGCCTGGTCCCTCCAACATGCATGGACAGGGGACAGTGGGA
CTAACTTCAGTACCTTGGCCTGCACAGTAGCAATGCTGGGAGCTAGAGGCAGGCAGGGCAGTTGGGTCCCTTGC
CAGCTGCTATGGGGCTTAGGCCATGCTCAGTGCTGGGGACAGGAGTTTTGCCCAACGCAGTGTATAACTGGGT
TCATGGGCTTACCCATTGGGTGTGCGCTCACTGCTTGGGAAGTGCAGGGGGTCTTGGGCACATTGCCAGCTGGGT
GCTGAGCATTGAGTCACTGATCTCTTGATGGGGCCAAATGAGTCAATTGAATTCATGGGCCAAACAGGTCCCAT
CCTCTTCATG

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FIGURE 1881

MAALKALVSGCGRLLRGLLAGPAATSWSRLPARGFREVVETQEGKTTIIEGRITATPKESPNNPNSGQCPICRW
 NLKHKYNYDDVLLSQFIRPHGMLPRKITGLCQEEHRKIEECVKMAHRAGLLPNHRPRLPEGVVPKSKPQLNRY
 LTRWAPGSVKPIYKKGPRWNRVRMPVGSPLLRDNVCYSRTPWKLYH

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FIGURE 1882A

AGCTGTCGTGCCCTCGTGGTCCCGGGAGTGCAGTGGTGTGCGCTCTCGGCGCGTGGCGCTAGGCATGGCGATGGAT
CAAGTAAACGCGCTGTGCGAGCAGCTGGTGAAAGCGGTGACGGTCATGATGGACCCCACTCCACCCAGCGCTAC
CGGCTGGGAAGCCCTCAAGTTTGTGTAGGAGTTTAAAGAAAAGTGTCTATCTGTGTGCCCTCGGCTGTGGCTTGAAGTTG
GCTGAGAAAACACAAGTTGCCATCGTCAGACATTTTGGCCTTCAGATCCTGGAACACGTTGTCAAGTTTTCGGGTGG
AACGGCATGTCTCGATTGGAGAAGGTGATCTGAAGAACAGTGTCTAGGAGTGTATGCAAAATGGAACATGAAAC
ATTTTGGAGAGGGAACCATATTAAGATGCTCTGCTCGAATGTAGTGGAAATGATCAAGCGAGAGTGGCCCA
CAGCATTGGCCTGACATGCTAATAGAATTGGACACTCTTCCAAAACAGGGGAAACACAGACAGAATTGGTGTATG
TTTATCCTTTTGGCACTGGCAGAGGATGTAGTGACTTTTCAGACACTTCCCCCTCAAAGAAAGAGGGACATCCAG
CAAACATTAAACCAGAACATGGAAGGATCTTCAGTTTCTGCTTAAACACACTTCAGAAAATGTAAACAAGTAT
CAGCAAGTGAAGACAGATACTTCTCAGGAGTCAAAGGCGCAAGCAAATGTGCGAGTAGGAGTTGCAGCACTGAAAT
ACTCTAGCAGGCTATATTGACTGGGTGTCTATGAGTCACATCACTGCTGAAAACGTATAAATCCTGGAGATACTG
TGTTTGCTGTTGAATGAACAGGAACCTTCAGTTGGGAGCGCGTGAGTGTCTTCTCATTGCGAGTCAGCAGAAAAGGC
AAGTTGGAAGACCGGAAGCCTTGTATGCTTATTATTGGAGATGTGGCATGCATATATACTCTCCGCCCGCACAG
ACTGCTGATGGAGGAGTTTGGTAGAAAAACACTACGCTCTTCTGAAGAGGCTCTGTCAAGTGTGTGTGCGCTG
GGCAATCAGCTGTGTGCAATGCTGGGTGCAGATCTGTATGTAGAAAACCACTCAAACCTTTGGAAAATACCTGGAA
TCTTTTCTGCTTTCACAAACCCTCAACAGTCAGTTTCTACGCTCTTCACTCAGATGACTTTGGGAGAGCCCTCTTC
AGGCATAGAAATCCTGTCCCGTGATCCTTGTCTATTAGCAATAATACCAAATATCTCTCGTGCTTCCATGACTAAC
TTGGTCAAGATGGGCTTCTCTTCAAACAGACAGCCCTAGCTGTGAATCTCTGCTTTGATTTGATGCCAT
GAGGACTTCAATGCTTTCTTCACTCTCCGAGCACACAAAGGAGGTGATGAGGTTGGCATGTGCTTTGGAT
CCCAAAATAGCTCCAGATGGCTGGGGAGTGGCTAAAGTATCAACTATCAACTTTTCTGTATGCTGCTTCTGTG
AATCTTGTGTCTGCAAGTTGGAACCTGGAGAAGGAGCCCTGTTCGGCTCTTCACTTCTCACTTCTGCGAGTGGGAA
GCCATGACTCTTTTTTGGAAAGTGTATACCCAGATGTTTCGAACACTAAATAGAGAAGAAATTCCTGTATAAT
GATGGAATAGAGCTATTGCGAGATGGTTCTGAACTTTGATACCAAGGATCCCCCTCATCTGTCTGCTGCTTCTACT
AATGTCTCTGCACTCTTTCCATTTGTACCTACAGACCAGAGTCTCTGCCCCAGGCTCTTCTCTAAGCTATTTTCA
TCTGTCACTTTTGAACCTGTTGAAGAAAGTAAAGGCCCCAGAAACCCGGGCGAGTGAAGAAATGTGAGGAGGCCATCT
TGTTCTCTCATCATCAAGATGTGTGCTGACTACCCCGAGCTTGTTGCTGCCCAATTTGACATGCTTTATAACCAT
GTGAAGCAACTCTCTCCAATGAGCTACTCTTGACACAAATGGAGAAGTGTGCCCTCATGGAAAGCCCTGTGTTCTC
ATTAGCAACAATTTAAGAACTACGAGCGTCAAGAGGTTGTTCTAGAGGAGCTGATGGCACCAGTGGCCAGCATC
TGGCTTCTCAAGACATGCAAGCTGTGCTGTCAGATGTGTGATGCTTTCATTGCGTGTGGGTACAGATCAGAAAG
AGCTGTGACCCAGGCGCTGGAGAGTCCGTGTGGCTTAAACCGTGCAAGAAATGAGCTTTTGTGTATACAGCACTCTG
GGTGTGGTGAACGAACTTGTGTCGCCACTGACCTAGAAGAGGCCAAAGTGGGGGATTTGTGGTGGTTATACAA
TCCAGTGGAAATCCAATCTTCCGTAAACCCCTGCACAGAGCAGATTCTGAACCTTCTTGACAATTTGCTTGGCGCTT
ATAAGCCACCAACATACATTATATGACACAGAAATGCTAGCCAAAATGGCAGAGCTTTTACCAGAGGCTCTGTGAT
ATGCTTGACGCGGGAAGAAATCTGCTATATTAGGATTAACCTCACTCTTGGCACTCAATGACTCTCTCTGTCTTC
AAAACCGTCTTGGAAAGAAATGACAGGTTTCTTCTCTACCTCTATGAAACACTGTTTTCATATCTTGAAGGAAGCA
GGCCCTTCCATGTCAGCAAGACTTCTATCTGTGGAGACCTTGCTACCCAGCTCTCAGCTCAGCTTTTGTCAAC
TTGAAACAAATTCCTGACTACCGACTCAGACCCATGCTTCATGTTTGTAAAGCCTCTGGTGTCTTCTGTCCCC
CCAGAGCACTATGAAGCCCTGTGATCCCCCATCTCGGAGCTCTTTTCACTCATCTCCATATGAGGCGTTTCTCAG
AAATGGCAAGTTATCAACCAAGAGGAGCTGCTGTGTGGAGAAGATGAGGCTGACAGTAAAGAACCCAGAGCTCAAA
GAGATGCTGGAGGAGCAACTGTGTAGGATGTTAAACCCGAGAAGTCAATGAGCTTAATCAGCGTTTGTGTGTTTCA
AAGAAGGGGTGTCGACCACAGTAGTGCTCCCCAGCAGATGGAGACGATGAAGAAAATGATGGCCACAGAGGTCACC
CCCTCAGATGTGCGAGAGCTTACAGACCTGGGCAAAATGCTGATGAAGCATGAGGATTTTGTACAGCGCTATTA
ATTACAGCTCTCAATCTCTGGCCTGGAAGAGATACTCTGCTGTCAGAGAGCAACACTCAGAGCTCTGCTGGCCCT
CTCTTCAAACAAAGTGTCTGACGGGACTGCTGCGAGATGACGTACGTGCTTTTACCAGTGTGTGTGAAGGCG
TTACAGATGCAAGGCGCAGCAGACGCGGTGCATGCTCTTCCGTGTCATCTGGCCTTCCAGATATACGAGGCACTG
CGCCCCAGGTACCTGGAGATAGAGCGTGAATGGAGCAAATCCTGAAATACAGAAGGACTCACTGACCAAGTT
GACTGCAAGCTTTTAAACCCCTCTCTGCAAGAAAGTGGCTGACAAGCGCGGAAGCCAAATTCAGACCCCTCAT
GCTGTTGTCATTGGGAAACCTTGGGAGAGCACTCCGAAAAGAAGTTCACATTAAGAATCTTCCCTCACTTTTC

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FIGURE 1882B

AAAAAACAAAGCCAATGCTGGAGACGGAGGTGCTGGACAAATGATGGGGGTGGCTGGCCACCATCTTTGAACCC
 TGAATCAAGCTTTTGGGCATCCTTCCCTCGGCCTTTCTTGTCATCTCTTCTTTCCCTTTGTAGCCGATCTCTAGGC
 CCTTCTTGCACTGCCACCTCACTTTCCACCACTGTCAGCCTGGAAAGAGATCCAGGCTCTGGAGCTGGAGAGAACAA
 GGCCCTGTGCAGGACCAGAAGTAATTATACTAAAGTATCAAGAAAGGGAGTTAGGGCTTAAACTATTCTGTCTAG
 ATGTCACAGATAGTTCCCAITTTCTACTTGGAGATTGGGCTTTTCCAAGAAAAGCTAGAGCAGAGCAGCCCTTCTCC
 CACAAGCCCTCCCAACCCCGTGCAGCCACATACCTGTACAGAATGGTAACTAAGGGTGCTGTGCCAACCCCTGCG
 ACTAGCAAGGCTCGCAGCAAGAGCACAGCCCTCAACTACTTGTGCCAGAGTTTCTCTTGGACCACTCCAACCTCCC
 ACTGAGCCCTTTTGCTGCTGGGCTGGCAGGAACTTTCCCACTCCCTAAGGGGCATGCTGGGTTAGGTGCTAA
 GTGCTGAAGAGAACTTGGTCAGITCTCTCAACTTTTGCTTTGGGCAAGAATCTGGTCACCTGATGGGATCCATGGT
 ACAGGCTACTGTAAACTTGGCACAGTATCAAGTATAGTACCTCCAAGGACCAAGGGCTGGGAAGTCTTTAGTGCT
 AACATCCCCITTAGAGTTCACACATCTTGCCCTTCCATGAATGACCCCTCAGTCTGGCCTCCCCAGCCTCAAGGT
 CCCTCAGGCACAAGAGCCACAGTACCTAGATAGTGTACATGACACCGTTGTCTCAACGATAATACAGACC
 AACTAGGCTACATCTGTGATGAGCAGCTAGCAAGGCCGCTGGTCTTCTCCTAGGACTAAGTCCAGGTGCTTCCA
 CAATCTCATGGTCTTTAGGTCCCTGGTTACTTTTCTCAAAGGCCATTTCCAAAAGAAATACATGCCCTTCACATCA
 CAACCTGTACTGTAGTCCATTCAGAGGTCAGTAAAGGCCCTGTAAAGAGAGGACATGGATACGGGACCTGGC
 CAGACCTGTGTGTCATCCAGTCCACTGACAAGAGGGTTTCCCGAGAGCCGAAGTGGACTGAAGCTACAGTTT
 AGCTGGTGCGGGCCACAGGCAGGGTCAGATTGAGAGAAGCAAGCTGGGGAAGCAGAAGTTGGGAGTCTGTGT
 TGCTCCCTCTTCTGTGTGGTGTCTCTGGGTTTCTGTGGATCGTGAAGGCGATCTCAAGAGTGTTCCTCCCAAC
 CTGATAGCTGCCTATTCTGTCTGGTGGGGCTGTGGAGGATGTAGTTGATTTATTGTCATTGTAATATTTTAA
 CATCCTGTGACTTCATGCTAGAAATTTCTATTGTTATAGAAACTTTTGTAGAAAACATTAACTCTAAAGCACA
 TCTGCTATGTCAGTAAAAATCTCAGTTTCGTACAG

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FIGURE 1883

CACCAAAATGGCGGATGACGCCGGTGCAGTGGGGGGCCCTGGAGGCCCTGGTGGCCCTGGGATGGGGAACCGCGGT
GGCTTCCGCAGAGGTTTCGCCAGTGGCATCCGGGGCCGGGGTCGCAGCCGTGGACCGGGCCGGGGCTGAGGCCGC
GGAGCTCGCGGAGGCAAGGCCAAGATAAGGAGTGGATGCCCGTCACCAAGCTGGGCCGCTTGGTCAAGGACATG
AAGATCAAGTCCCTGGAGGAGATCTATCTCTCTCCCTGCCCATTAAGGAATCAGAGATCATTGACTTTTTCCTG
GGGGCCTCTCTCAAGGATGAGGTTTTGAAGATTATGCCAGTGCAGAAGCAGACCCGTGCTGGCCAGCGCACCAGG
TTCAAGGTGACAGGCCGCCGTGGCTCTGTGCTGGTGCGCCTCATCCCTGCACCCAGGGGCACTGGCATTGCTCC
GCACCTGTGCCAAGAAGCTGCTCATGATGGCTGGTATCGATGACTGCTACACCTCAGCCCAGGGCTGCACTGCC
ACCCTGGGCAACTTCGCCAAGGCCACCTTTGATGCCATTTCTAAGACCTACAGCTACCTGACCCCGACCTCTGG
AAGGAGACTGTATTTACCAAGTCTCCCTATCAGGAATTCAGTACCACCTCGTCAAGACCCACACCAGAGTCTCT
GTGCAGCAGACCCAGGCTCCAGCTGTGGCTACAACATAGGGTTTTATACAAGAAAAATAAAGTGAATTAAGCGT
G

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FIGURE 1884

CGCGGAGCTCGCGGAGGCAAGGCCAAGATAAGGAGTGGATGCCCGTCACCAAGCTGGGCCGCTTGGTCAAGGAC
ATGAAGATCAAGTCCCTGGAGGAGATCTATCTCTTCTCCCTGCCCATTAAGGAATCAGAGATCATTGACTTTTTC
CTGGGGGCTCTCTCAAGGATGAGGTTTGAAGATTATGCCAGTGCAGAACGAGACCCGTGCTGGCCAGCGCACC
AGGGCTCTCCATTGTCCCGTGACAGAGGCTACTAGGGGAACAAGATCGGCAAGCCCCACACCGTCCCTGCAA
GGTGACAGGCCCGCTGGCTCTGTGCTGGTGCCTCATCCCTGCACCCAGGGGCACTGGCATTGTCTCCGCACC
TGTGCCCAAGAAGCTGCCATTTCTAAGACCTACAGCTACCTGACCCCGACCTCTGGAAGGAGACTGTATTACC
AAGTCTCCCTATCAGGAATTCACTGACCACCTCGTCAAGACCCACACAGAGTCTCTGTGCAGCAGACCCAGGCT
CCAGCTGTGGCTACAAATAGGGTTTTTATACAAGAAAAATAAAGTGAATTAAGCGTG

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FIGURE 1885

MPVTKLGRVLKDMKIKSLEETIYLFSLPIKESIIIDFFLGDSLKDEVLKIMPVQKQTRAGQRTLHCPRARLLGE
QDRQAPHRPLQGDRPLRLCAGAPHFCTQGHWHRLRTCAQELMPSLRPTAT

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FIGURE 1886

GTGTTCCGGCCGATCCCACTCTTCTCGACCTGGAGCTCTACCTTCGGAGGCCACATCTTGCCCACTCCGGC
CGCGGGGCTAGCGCGGGTTTCAGCGACGGGAGCCCTCAAGGGACATGGCACTACAGGGCGCCGGCGGGCGGGC
CCCGAAATGGAGCTGGCCCGGAATGGGGAGGGTTCGAAGAAAACATCCAGGCGGGAGGCTCAGCTGTGATTGACA
TGGAGAACATGGATGATACCTCAGGCTCTAGCTTCGAGGATATGGGTGAGCTGCATCAGCGCCTGCCGAGGAAG
AAGTAGACGCTGATGCAGCTGATGCAGCTGCTGCTGAAGAGGAGGATGGAGAGTTCTTGGCATGAAGGGCTTTA
AGGGACAGCTGAGCCGGCAGGTGGCAGATCAGATGTGGCAGGCTGGGAAAAGACAAGCCTCCAGGGCCTTCAGCT
TGTACGCCAACATCGACATCCTCAGACCTACTTTGATGTGGAGCCTGCTCAGGTGCGAAGCAGGCTCCTGGAGT
CCATGATCCCTATCAAGGTGGTCAACTTCCCCAGAAAATTGCAGSTGAACCTCTATGGACCTCTCATGTGGTCT
TCACTCTGGTTGCTATCCTACTCCATGGGATGAAGACGCTGCACATATTATCCGGGAGGGCACCTGATGGGCA
CAGCCATTGGCACCTGCTTCGGCTACTGGCTGGGAGTCTCATCCTTCACTTTACTTCTTGCTTACCTGTGCAACG
CCCAGATCACCATGCTGCAGATGTTGGCAGTCTGCTGGGCTATGGCCTCTTTGGGCATTGCATTGCTGTTTCATCA
CCTATAATATCCACCTCCACGCCCTCTTCTACCTCTTCTGGCTGTGTGGTGGGTGGAGTCTCCACACTGCGCATGG
TAGCAGTGTGGTGTCTCGGACCGTGGGCCCAACACAGCGGCTGCTCCTCTGTGGCACCTGGCTGCCCTACACA
TGCTCTTCTGCTCTATCTGCATTTTGCCTACCAAAAAGTGGTAGAGGGGATCCTGGACACACTGGAGGGGCCCA
ACATCCCCCCCATCCAGAGGGTCCCCAGAGACATCCCTGCCATGCTCCTCTGCTCGGCTTCCCACCACCGTCC
TCAACGCCACAGCCAAAGCTGTTGCGGTGACCTGCAGTCACACTGACCCCACTGAAATTCTTGGCCAGTCTC
TTTCCCCAGCTGCAGAGAGGAGGAAGACTATTAAGGACAGTCTGATGACATGTTTCGTAGATGGGGTTTGCA
GCTGCCACTGAGCTGTAGCTGCGTGAGTACCTCCTTGATGCTTGTGGCAGCTCTTGAAGGCCACAAGGGCCAGAA
CTCCTGGCCAGGACTGCAAGGCTCTGCAGCCAATGCAGAAAATGGSTCAGCTCCTTTGAGAACCCCTCCCCACCT
ACCCCTTCTTCTCTTTATCTCTCCACATTGTCTTGCTAAATATAGACTTGGTAATTAATGTTGATTGAAG
TCTGG

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FIGURE 1887

MATTAPAGGARNGAGPEWGGFEENIQGGSSAVIDMENMDDTSGSSFEDMGELHQRLEEEVDADAADAAAAEEE
DGEFLGMKFGKQLSRQVADQMWOAGKRQASRAFSLYANIDILRPYFDVEPAQVRSRLLESMPKVVNFPQKIA
GELYGPLMLVFTLVAILLHGMKTSDTIIREGTLMGTAIGTCFGYWLGVSSFIYFLAYLCNAQITMLQMLALLGYG
LFGHCIVLFIITYNIHLHALFYLFWLLVGGSLTRMVAVLVSRIVGPTQRLLCGTLAALHMLFLLYLHFAYHKVV
EGILDILEGPNIPPIQRVPRDIPAMLPARLP TTLNATAKAVAVTLQSH

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FIGURE 1888

GC GGAAGCGGCGCCATTCTGTTCCGAGCGCTACTGCCAGCTGATCCGGGAGCTAACTACCGGCGCGGGGCGG
GGCCGGGGCGGGGCCCGACGTCCCCGCGGGGCCGGGACCGCGAGGAGGACGGCGGGGGCCTGGAGCCCGCGGC
CGTGGCCCGCGACCTATTGAGGGGCACATCTAACATGTCATTTGAGGAGCTGTTGGAATTGCAGAGCCAAAGTGGG
GACTAAGACGTACAAA CAATTGGTAGCTGGAATAGTCCTAAGAAACAAGCTTCTAGACCACCTATCCAAAATGC
ATGTGTTGCAGATAAGCAGAGCCTCTGGAAATGTCAGCCAAGATCCGAGTACCATTTTTACGTACGGTTGTTCC
CATTAGTAAAAAGGTAGCCCCGGGACCTCGCTTTGATGATCTGTACGGGGAATATAATCCTGAGGTGTTTGACAA
AACATACCAATTCTTGAATGACATCCGAGCGAAAGAGAAAGAGTTGAAGAAGCACCTTTCAGGAGAGGAGCATGA
GAAACTGCAGCAACTGCTTCAGCGAATGGAGCAGCAAGAAATGGCACAGCAGGAACGAAAGCAACAGCAGGAGCT
GCACCTGGCCCTGAAGCAAGAACGTCGGGCTCAGGCCCAGCAGGGCCATCGGCCATACCTCTGAAAAAATCTGA
GAGCGCCAGTTGGCACTAGCTGAGAAGTTCAAGGAGCTGAAACGCAGCAAGAAATGGAGAACCTCTTGAGTCG
AAAGAGCGCAGCAAAATGCAGGCAAGGACAGGAGACATCTCCCTTTGAGCAAGAGTAATAAGGAACTATCCCTG
CTCTGCCACTGCCCCAGGAGACATGGATCTGTGAGGACAGATTTGGCCACGGCTGGTTCCGTTCAAGGGCAAG
GATCACAGCTGCCCTGAAATCTATTGCTCAGAGAAGACTAGAGGGCTCTTGGACTATCCCTAGGGGTACACAA
GAATAGTTACGCCTTCTGCCATGCCACACAGCCTCAGCTTGAATCTGGTTCATTGCGTCTCTGTCTCTCTC
ATCCTTGCCCTTAAACAGGGATTCTGATACCGAAGAAGAGGGGCCAATGAAACCATTGGAGTCTGTTCGTGACTC
CCAGGGCTGGACATTATGTAGGAGCCACTTCATAAACATTCTCTTTACTCATCTTTTATTCTGTTTTTTGTGG
CCTTCTTTTTGTGTTTTCCCCCGAAACAGAGTCTCGCTCTGTCAACCAGGCTAGAGTACAGTGGTGCAATCTCG
CCTCACTGCAACCTCCACCTCCAGGTTCAAGTGATTCTTGTGCTCAGCCTCCCGAGTAGCTGACATCGGCCAC
CAAGCCAGCTAATT

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FIGURE 1889

MPGANYRAGAGAGARRPRGARDREEDGGGLEPAAVARDLLRGT SNMSFEELLELQSQVGTKTYKQLVAGNSPK
KQASRPPIQNACVADKHRPLEMSAKIRVPFLRQVVPISKKVARDPRFDDLSGEYNPEVFDKTYQFLNDIRAKEKE
LKKHLSGEEHEKLQOLLQRMEQQEMAQQERKQQQELHLALKQERRAQQQGHRPYFLKKSEQRQLALAEKF KELK
RSKKLENFLSRKRNRNAGKDRRHLP LsKE

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FIGURE 1890

GCTTGGCTGTGTTTATCTCGTTGGGGACTAAGGCGTCGGTTGGCGCGCAACGGGTTCTAGGCTGCAGGCAGCTCG
AGGACCGCGCGCCCGCCCCGGCTCGGCCTGGCAGATAGCAGAGGCAGCAGGCCGTGCCGGGGGGGCATGTTGCT
GTAAACCACTGGCCAGGGGATGTTACGGTGGACAGTGCACCTGGAGGGCGGGCCCCGAGGGGTGAACCATGCTGC
AGTGGCTGTCGGGCATCGGGTATACTCCTTCGGGGGTTACTGCTCTGGTGAAGACTATGAGACACTGCGTCAGAT
AGATGTGCACATTTTCAATGCAGTGTCTTGCGTTGGACAAAGCTGCCCGCGGTGAAGTCTGCCATCCGTGGGCA
AGCTCCTGTGGTACCCTACATGCGCTATGGACACTCAACCGTCTCATCGACGACACAGTCCCTCTTGGGGCGG
GCGGAATGACACCGAAGGGGCTGCAATGTGCTCTATGCCCTTGACGTCAATACGCACAAGTGGTTACACCCCCG
AGTGTGAGGGACAGTTCCTGGGGCCGGGATGGACATTGAGCCTGTGTCTAGGCAAGATCATGTACATTTTGG
GGGCTACGAGCAGCAGGCGGACTGTTTTCCAATGACATTCAAGCTAGATACCAGCACCATGACATGGACTCT
TATCTGTACAAAGGGCAGCCCTGCACGCTGGAGGGACTTCCACTCAGCCACAATGCTGGGAAGTCACATGTATGT
CTTTGGGGGCGTGCCGACCGCTTTGGGCCATTCCATTCCAACAATGAGATTACTGCAACCGCATTGAGTCTT
TGACACCGAAGTGAAGCTTGGCTGGACTGTCCCCGACTCCAGTGTGCTGAGGGGCGCGGAGCCACTCGGC
CTTTGGCTACAATGGGGAGCTGTACATCTTTGGTGGTTATAATGCAAGGCTGAACCGGCACTTCCATGACCTCTG
GAAGTTTAACTCTGTGCTCTTACCTGGAAAAAGATTGAACCGAAGGGGAAGGGGCCATGTCCC CGCGCGGCCCA
GTGCTGCTGTATTGTTGGTGACAAGATTGTCTCTTTGGGGGTACCACTCTCTGAGGAAGGCTGGGAGA
TGAATTGACCTTATAGATCATTCTGACTTACACATTTTGGACTTTAGCCCTAGTCTGAAGACTCTGTGCAAACT
GGCCGTGATTCAGTATAACCTAGACCACTCTGTTGCTCATGATATCAGGTGGGAGCTGAATGCCATGACCAC
CAACAGCAATATCAGTGCAGCCATCTGCTCTCCATGGGTAAGAGGAGTTTCTGCCACCTCCCCCTCTGAGCC
TGCTGTCACTCTTCACTGCCCTGCCCCATCTGTCAACCACCTGCTCTTTGACCCCTGGACTTGGTATACCTCCAT
GTGGAGTTGTTGGGCGAGAGGTGTCTCTGTGCTGTGAATTCAGTGGGGAGCTGTAGCGGGGTGGGGGCTAGGTT
CCTCCCCCTTGGGCGGAGGGCCCCCTCCCTTGGTGCTGTGCCCCATCCACCTCCTTTGAGTGTCTCTGGGC
CTCAGCTCTGCCAGGGCCAGCCAGGTTCTGCTGGGAAGGGAAGGGAATGGGGAGAAGGAGAAGCAAGCAGTGT
CTGAGCCTCAGGAGCTTCCCCCTCCCCCTTTGCTATCCCCCTCCCCTCTGCTTGAAGCCTTGAGCCTTGACTGGGA
GCTGAAAGGAGTTGCAGCTGTTGGCATGAGACCTCCTTCTCCCGTCTTGGGGAGGTGGGGACCGAGAGATAAAT
CCCAACCTTCTTGAAGTGTGCTGTACTCTGAAGTTAGCCAGCTCAGATTATATAAAATAAATAAAATCTC
CAAA

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FIGURE 1891

MLRWTVHLEGGPRRVNHAHAVGHRVYSFGGYCSGEDYETLRQIDVHIFNAVSLRWTCLFPVKSAIRGQAPVVPY
MRYGHSTVLIDDTVLLWGGGRNDTEGACNVLYAFDVNTHKWFTPRVSGTVPGARDGHSACVLGKIMYIFGGYEQQA
DCFSNDIHKLDTSTMTWLICTKGSPARWRDFHSATMLGSHMYVFGGRADRFGEFHSNNEIYCNRIRVFDTRTEA
WLDCCPTPVLPEGRRSHSAFGYNGELYIFGGYNARLNRHFDLWKFNVPVSFTWKKIEPKGKGPCPRRRQCCCIYG
DKIVLFGGTSPSPEEGLGDEFDLIDHSDLHILDFSPSLKTLCKLAVIQYNLDQSCLPDIRWELNAMTTNSNISR
PIVSSHG

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FIGURE 1892

CCTTCAATGTGAAGCTAATATCTCCTATAGCATAGTTAATGTTTATTCAACAAATATTCATGCAGCGGAGTCAAG
 AACACACCCAGCATGGCGGAGAAAGGAAGAGACGCCGAGCGGGCGAGTGGCGGCCGAGCAAAAGCCGGAGCGCGGAGCG
 GGGCCGCAGAGACAGGGCCGGGTCCGGACGGGCCGAGATGCCCTATAAATGAAAAAGGAGAAGGAGGCCGCCCA
 GGTTGCCAAATGCACAGCCAAGCCTAGCAGCTCGGGCAAGGATGGTGGAGGCGAGAACATGAGGAGGGCCAGCC
 GCAGCCCCAGCCCCAGCCCCAGCCCCAAGCCAGCTCAGCCACCGTCATCCAAACAGCGTCCCGACAATAGCAC
 CGCGGCCCCACGCAGCTCAGCAAAATCAAGTACTCAGGGGGGCCAGATTGTCAAGAAGGAGCGACGGCAAG
 CTCCTCCCGCTTCAACCTCAGCAAGAAATCGGGAGCTGCAGAAGCTTCCTGCCCTGAAAGATTGCCAACCCAGGA
 CGGGGAGGAGCTGTTTATCCAGAAGCTACGCCAGTGTGTGTCTCTTTGACTTCGTGTGACAGCCACTCAGTGA
 CCTCAAATTCAGGAGGTGAAGCGGGCAGGACTCAACGAGATGGTGGAGTACATCACCCTAGCGCTGATGTTGT
 CACTGAGGCCATTTACCTGAGGCTGTCAACATGTTTTCAGTGAACCTCTTCCGGAGCGTCCACCTTCATCGAA
 TCCACAGGGGCTGAGTTTGACCCAGAGGAAGATGAGCCACCTGGAAGCTGCTTGGCCACATCTCCAGCTCGT
 GTATGAGTCTCTTACGTTTCTTGAGTCTCCTGATTTCCAGCCAAACATAGCCAGAAGTACATCGACCAGAA
 GTTTGTACTTGCTCTCTAGACCTATTGACAGTGAGGATCCTCGAGAGCGGGACTTCCTCAAGACCATTTTGCA
 TCGCATCTATGGCAAGTTTTTGGGGCTCCGGGCTTATATCCGTAGGCAGATCAACCACATCTTCTACAGGTTTAT
 CTACGAGCGGAGCATACAAAGGGGATTGCTGAGTCTCTGGAGATCCTGGCGAGCATCATCAATGGCTTTGCTCT
 GCGCTTAAAGAGAAGACAAAGATGTTCCCTCATCCGTGCTCTACTTCCCTTACAAAGGTCAAGTCCCTGAGTGT
 CTACCCCTCAGCTGCATACCTGTGTGGTGACAATTCCTGGAGAAGGAGAGCAGTCTGACTGAGCCGGTAAATGT
 GGGACTTCTCAAGTTTTGGCCCAAGACCCACAGCCCCAAGGAGGTGATGTTCTTGAATGAGCTGGAGGAGTCT
 GGCAGCTCATTGAACCTTCTGAGTTCAGCAAAAGTATGGAACCCCTCTTCCCGCAGCTGGCCAAGTGTGTCTTAG
 CCCCCTATTCCAGGTGGCAGAGCGTGTCTCTATTACTGGAACAATGAGTACATCATGAGCCTGATAAGTGACAA
 TGCTGCCCGAGTCTCCCATCATGTTCCCTGCACCTACAGGAACCTCCAAGGCCATCGGAACAAGACAATCCA
 TGGACTGATCTATAAGCCCTGAAGTTGTTTATGGAATGAATCAGAAGCTGTTTGAATGACTGCACACAACAATA
 CAAGGCAGAGAAGCAGAAGGGCCGGTCCGAATGAAGGAAAGGGAAGAGATGTGGCAAAAATCGAGGAGCTGGC
 CCGGCTTAATCCCAAGTATCCCATGTTCCGAGCCCTCCACCACTGCCCCCTGTGTACTCGATGAGACAGAGAC
 CCCCACAGCTGAGGACATCCAGCTTCTGAAGAGGACTGTGGAGACTGAGGCTGTTTCAGATGCTAAAAGACATCAA
 GAAGGAGAAATGCTGCTGCGGAGGAAGTCGAGCTGCCCCAGGACGTCTCTGCCCCCTACAGTTCCTACCAAGGGCCACAG
 CAAGCGGGCGGAAGAGTTTCTTAATGCCAGCCAGGAGGCTCTCTGCCCCCTACAGTTCCTACCAAGGGCCACAG
 CCAACAGGACCCCTGGGACACTGCCCTGGCCCTCCATACTCTGCTCCCTACTGGCTGTCTTGGGGGAAGGCAGCG
 CTCTTAGCTACTCAAGGGAGGGGGATGTGGGCACTTGAAGCAGGGACACCCAGCAATGGTGGTCTCTTCTCCCC
 AAAAGGTGTTTCAATGCCCTCTGAGGCTAGTACAGGCTGAGCACTAAGTGTCTTAGTGCTCAGACAACCTGGGGAT
 CCTCTATTCTTCCCTTCACTCTCATTGAAAGCCAGGATATCCCCCTCTCTCTCTCCCTGCAGAGGACATGAG
 GGAACAGGAGGAGATTATCTCACCAGAGTTATGTCAAGCCCCATTGGTCCAGAGTAGCTGAAGGGAAGCCAAAC
 CCCCTGCAGCACAAATAGGTCATTTGGAGGGCCAGGGCTGAGGAGGCTGCTTTGGTGAGCAGCAGCCCTGGG
 CATGCTTGACCAAGGGAGGTCAAAGGGAAGAAAGTATAGGCTGTGGACAATAACTGATGAATATAGGGCCAGAT
 GGACAAGTGGGGCCGGGGAGGGATGAATAAACACCTCACCCCGTCCCTGTTGTGCTGTTGGTTCCTCAAAACTAGAAAGAGG
 GTCACAGACATGGAAGGGACACCCCTGGGGCTGACTGCTTTCTGTGCTGTTGGTTCCTCAAAACTAGAAAGAGG
 AAGCAGGAGCGGTGCCCAAGCATGGCTCTGCCAACCTATTATTTCTCTGTTTGTGCTATGCTGGGCAGG
 CTTCTCTTGTCTCCCTTATAGGTATTTGGAGGGCCAGGGCTGAGGAAGCGCGGACCAAGGTCAGGCGGCGCA
 GGCAGTGGCGCTTTTGGCTGTGTACATAGGGTGCTTTATTTCTCACAAGAGTGATACATGTAAGGTGGGTGGGG
 TTGACCGATGTCCCATATGTACAGAACTGAATAAGTGGGTCTCTG

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FIGURE 1893

MPYKLKKEKPPKVAKCTAKPSSSGKGGGENTEEAQFPQPQFPQQAQSQPPSSSNKRPSNSTPPTQLSKI KYS
GGPQIVKKERRQSSSRFNLSKNRELQKLPALKDSPQTQEREELFIQKLRQCCVLFDFVSDPLSDLKFKEVKRAGLN
EMVEYITHSRDVVTEAIYPEAVTMFSVNLFTLPPSSNPTGAEFDPDEDEPTLEAAWPHLQLVYEFFLRFLLESPD
FQPNIAKKYIQKFVLALLDLFDEDPREPRDFLKTILHRIYKGKFLGLRAYIRRQINHIYRFIYETEHNGIAEL
LEILGSIINGFALPLKEEHKMFLIRVLLPLHKVKSLSVYHPQLAYCVVQFLEKESLTPVIVGLLKFWKTHSP
KEVMFLNELEEILDVIEPSEFSKVMEPLFRQLAKCVSSPHFQVAERALYYWNNYIMSLISDNAARVLPIMFPAL
YRNSKSHWNKTIHGLIYNALKLFMEMNQKLFDDCTQQYKAEKQKGRFRMKEREEMWQKIEELARLNPQYPMFRAP
PPLFPVYSMETETPTAEDIQLLKRTIVETEAVQMLKD IKKEKVLRRKSELQPDVYTIKALEAHKRAEEFLTASQE
AL

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FIGURE 1894

GAATTCCGCCCAGACGCAGGCTTCTTCTGGGTCTTGGTCCTGCATCCTCTCTCTCCAGAGCCTCCGTTAGGGG
 GTGGGAAAGGACTTTGCCATAGGTCGCTGAGGCCACCATCTGCTCTTACTGGCCAAGGGCGTAAAAAGATAGT
 CTTCCCATTAGCTAGAGAGCAAACCCAGAAAAGCCTATTGGTTGCGCCGTCGCCGGGCTTGGTCCGCTTTGAAG
 GCGGGCTGCGGCTGCGAGAGGAGGGCGGGCGGGGAGGCTAGCTGTTGTCGTGGTTGCTCGGAGGCACGTGTGCAGT
 CCCGGAAGCGGCGAGGGGAACTGCTCCGCGCGCGCCCGGGAGGAGGAACCGCCCGTCCCTTAGGGTCCGGG
 CCCGGCCGGGCCATCGGATTCAATGCCTGAGCCCCGCTCCCGCTGTCTTCTGCTTCTTCCCTTGCTGCTGCTGCTG
 CTGCTGCTGCTGCCGGCCCCGAGCTGGGCCCCGAGCCAGGCCGAGCTGAGGAGAACGACTGGGTTTCGCCCTGCC
 AGCAAATGCGAAGTGTGTAATATGTTGCTGTGGAGCTGAAGTCAGCCTTTAGGAAACCGGCAAGACCAAGGAG
 GTGATTGGCACGGGCTATGGCATCCTGGACCAAGGCCTCTGGAGTCAAATACACCAAGTCGGACTTGGCGTTA
 ATCGAAGTCACTGAGACCATTTGCAAGAGGCTCCTGATTATAGCCTGCACAAGGAGAGACCGGCAGCAATCGAT
 TTGCCAAGGGCATGTCAGAGACCTTTGAGACATTACACAACCTGGTACACAAGGGGTCAAGGTGGTGGATTGACA
 TCCCCATGAGCTGTGGAACGAGACTTCTGCAGAGGTGGCTGACCTCAAGAAACAGTGTGATGTGCTGGTGGAAAG
 AGTTTGAGGAGGTGATCGAGGACTGTTACAGGAACCAACGAGGAGGAGACCTGACTGAATTC

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FIGURE 1895

MDSMPEPASRCLLLLPLLLLLLLLLLPAPELGPSQAGAEENDWVRLPSKCEVCKYVAVELKSAFEETGKTKEVIGT
GYGILDQKASGVKYTKSDLRLIEVTETICKRLIIACTRRGPAIDLPRACQRPLRHYTTWYTKGSRW

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FIGURE 1896

TGATGAAACTGTAACCTTACAAGAAAAGGGCTGGGTTTTGAAAATAACACAGGCTCTAAAAACCCCTAAGAAGCGGT
GCAACTTTTGGCAGGAATCGGGGTTAGCGGGACCTCAAGGGCTCACTGCGGCTAAGTGAACGCTGACTGGTCCTC
CAGCGTGAGCTAGAACAGACGCTCTCTATGGTCAAGTAAACAGAGCGTGTGCTGCTTCCCCATGTGGTGGGGTTG
CGCATAGTACAGTAGCTGCACCACTAGAAAAGATGGCGGAGCAAGAGCAAAGAAAAATCCCTTTGGTCCAGAAAAAT
CTCTGAAAAAGAGGAAGGCTTATCAAGCCCTCAAAGCCACCCAGGCAAAGCAGGCACCTTTTGGCAAAGAGGAG
CAGAAGAAAGGAAAAGGGCTCAGGTTTTAAGCGACTGGAATCATTCCTACATGATTCTGGCGGCAGAAACGTGAC
AAGGTGCGCTCTCAGACGACTAGAAAGTGAACCTCATGCCTTGGAATTGCCAGATAAACATTCCTTGGCCTTTGTT
GTACGCATCGAAAGGATTGACGGCGTGAGTTTACTGGTGACAGAACCATTGCAAGACTTCGCCTAAAGAAAAAT
TTTAGTGGTGCTCTTTGTAAGTCAACCCCCAGAATCTAAAAATGCTGCGTATAGTGGAACTTATGTGACCTGG
GGATTTCCAAATCTGAAGTCTGTCCGAGAATCATTTTGAAACGTGGACAAGCCAAGGTCAAGAATAAGACCATC
CCTCTGACAGACAATACAGTGATTGAGGAGCACCTGGGGAAGTTGGCGTCATTGCTTGGAAAGCCTCATTCTAT
GAAATTGCCTTCCCAGGGAAGCATTTCAGGAGATCTCATGGTCTTGTGCCCCTTCCACCTCTCAGTGGCCCCGT
CATGCTACCAAAAATAGAGTGGGCTTCTCAAGGAGATGGGCACACCTGGCTATCGGGGTGAACGCATCAATCAG
CTCATCCGTCAGCTGAACTAGACCCAGGTGCCAACTGCGGTAAATTTTTTATCAGTGAAGTGGAAAGCATGTGTT
TTGTTTTGGAATTTTTATCAAGTATCTTCAGAGAAGATTATTTCTGCTTTATCTTCAGAACTGGAAAGGGTC
AAAGAAAAGACAGTAGCTGGCCGGTCGTGGTGGCTCATGCCTGTAATCCCAACACTTAGGAGGGCTGAGGTGGGC
AGATCACCTGAGGTTGGGAGTTTCGAGACCAAGCCTGACCAACATGGAGAAATGCCATCTCTACTAAAAATACAAA
ATTAGCCGGGCATGGTGGCAGCTGCTGTAAATCCAGCTACTCAGGAGGCTGAGGCAGGAGAATCGCTTGAACCT
GGGAGGTGGAAGTTGCAGTGAGCTGAGATCACGCCATTGCATCCAGCTGGGCAACAGCGAAACTCTGTCTCA
AAAAAAAAGAAAAGACAGTAGCATATGTTTCATGTCAAGCACTCTCATCAGATCGAGTTCCAAGGAAAAATCC
AGTGTCTTCTGCATTGGGTGCTGTGTCATCTGAAATCGGCACATTCATGGAGGAAGGAGTCTGCTTTTGTGCA
TGATCTCTAGGTTTAAATGTTGGTAAATGAGTCACTCTAGCATTTGTAGAAGGCTCCCTGAGACTCCTGCAGCAG
TCGACCAAGCCCAAGGACATAATTGAATCTGGAGAGTCTCTGGGCCCTGTTTTGAAAAAGACTTGAATACACAT
AGGAAGAAAGGCCATAAAAAATAATGTTCACTTGTCTCTGC

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FIGURE 1897

MISSCTTRKMAEQEQRKIPLVPENLLKKRKAYQALKATQAKQALLAKKEQKKGKGLRFKRLESFLHDSWRQKRDK
VRLRRLEVKPHALELPDKHSLAFVVRIERIDGVSLLVQRTIARLRKKIFSGVFVKVTPQNLKMLRIVEPYVTWG
FPNLKSVRELILKRGQAKVKNKTIPLTDNTVIEEHLGKFGVICLEDLIHEIAFPKGKHFQEISWFPCPFHLSVARH
ATKNRVGFLKEMGTPGYRGERINQLIRQLN

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FIGURE 1898

GC GCCTGT CAGGGAAGCGGCGCGCGCGCGGGCGGGCGGGCGGGCTGGGGATCCGCCGCGCAGTGCCACGCGCCAG
CGCCAGACCCGCGCCCCGCGCTCTCCGGCCCGTCGCCTGCCTTGGGACTCGCGAGCCCCGCACTCCCGCCCTGCCT
GTTTCGCTGCCGAGTATGGAGCTGCTGTGTTGCGAAGGCACCCGGCACGCGCCCCGGGCGGGCGGACCCGCGG
CTGCTGGGGGACCAGCGTGTCTGCAGAGCCTGCTCCGCCCTGGAGGAGCGCTACGTACCCCGCCCTCTCTACTTC
CAGTGCCTGCAGCGGGAGATCAAGCCGCACATGCGGAAGATGCTGGCTTACTGGATGCTGGAGGTATGTGAGGAG
CAGCGCTGTGAGGAGGAAGTCTTCCCCCTGGCCATGAACCTACCTGGATCGCTACCTGTCTTTCGCTCCCCACCCGA
AAGGCGCAGTTGCAGCTCTCTGGGTGCGGTCTGCATGCTGCTGGCCCTCCAAAGCTGCGCGAGACACAGCCCTGACC
ATCGAAAACTGTGCATCTACACCGACCACGCTGTCTCTCCCGCCAGTTGCGGGACTGGGAGGTGCTGTCTCTA
GGGAAGCTCAAGTGGGACCTGGCTGCTGTGATTGCACATGATTTCTGGGCTTCATTTCTGCACCGGCTCTCTCTG
CCCCGTGACCGACAGGCGCTTGGTCAAAAAGCATGCCAGACCTTTTTGGCCCTCTGTGCTACAGATTATACCTTT
GCCATGTACCCGCCATCCATGATCGCCACGGGCAGCAATTGGGGCTGCAGTGC AAGGCTGGGTGCTGCTCATG
TCCGGGGATGAGCTCACAGAGCTGCTGGCAGGGATCACTGGCACTGAACTGGACTGCCTGCGGGCCTGTGAGGAG
CAGATCGAAGCTGCACTCAGGGAGAGCCTCAGGGAAGCCTCTCAGACCAAGCTCCAGCCACAGCGCCCAAAGCCCC
CGGGGCTCCAGCAGCCAAAGGGCCAGCCAGACCAGCACTCTACAGATGTACAGCCATACACCTGTAGCCCTGG
AGAGGCCCTCTGGAGTGGCCACTAAGCAGAGGAGGGGCGCGTGCACCCCACTCCCTGCCTCCAGGAACACACCC
ACATCTAAGCCTGAAGGGGCGTCTGTTCCCCCTTCAAAAGCCCAAGGGAATCTGTGCTCCTACCCATCCCCGAGTG
TGCCTAAGGGGCGCGGCCAGCCATGTCTGCATTTGCGTGGCTAGTCAAGCTCCTCCTCCTGCATCTGACCAAGC
AGCGCCTTTCCCAACTCTAGCTGGGGTGGGCCAGGCTGATGGGACAGAAATTGATACATACCAAGCAATTCTCTT
TTGAACGCCCCCCCACCCTGGGGGCTCTCATGTTTTCAACTGCCAAAAATGCTCTAGTGCTCTCTAAAGGTGT
TGTCCCTTCTAGGGTTATTGCATTTGGATTGGGGTCCCTCTAAAAATTTAATGCATGATAGACACATATGAGGGG
AATAGTCTAGATGGCTCCTCTCAGTACTTTGGAGGCCCTATGTAGTCCGTGCTGACAGCTGCTCTAGAGGGAG
GGGCTTAGGCCTCAGCCAGAGAGCTATAAATTCCTCTTTGCTTTGCTTTCTGCTCAGCTTCTCCTGTGTGATTG
ACAGCTTTGCTGCTGAAGGCTCATTTTAAATTTAATTTGCTTTGAGCACAACTTTAAGAGGACATAATGGGGG
CTGGCCATCCCACAAGTGGTGGTAACCCCTGGTGGTTGCTGTTTTCTCCTCTCTGCTACTGGCAAAGGATCTTT
GTGGCCAAAGGAGCTGCTATAGCTGGGGTGGGTCATGCCCCCTCTCCTCCTTGTGCTGCTGCCCCATCTCCAG
CAGGGAATGCGCAGGGATGCCCTGGAGGTGGCTGAGCCCCGTGCTAGAGAGGGAGGCAAGCCCTGTTGACAC
AGGTCTTTCTAAGGCTGCAAGGTTTAGGCTGGTGGCCAGGACCATCTCTACTGTAATAAAGATGATTGTGA
AATAAACTGGCTTTGGCTTCTTGGAAAAA AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1899

MELLCCGTRHAPRAGPDPRLGQDQVLQSLRLLEERYVPRASYFQCVQREIKPHMRKMLAYWMLEVCEEQRCEE
EVFPLAMNYLDRYLSCVPTRKAQLQLGAVCMMLASKLRETTPLTIEKLCIYTDHAVSPRQLRDWEVLVLGKLKW
DLAAVIAHDFLAFILHRLSLPRDRQALVKKHAQTFLALCATDYTFAMYPPSMIATGSGIAAVQGLGACSMGDEL
TELLAGITGTEVDCLRACQEQIEAALRESLREASQTSSSPAPKAPRGSSSQGPSQTSTPTDVTIAHL

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FIGURE 1900

CACCGCGCAAGCGCATCTTGGCCTTTCTTCAGTCCCCACGTGCGATCCTTCCCGGCAACTTTTCGAGAAAAATG
CCCAAAATTC AAGCGCGCCCGTGGGGTGGGGGTGAGGAAAAACATGCGCCCTGGCCGATCAGATCCTGGCTGGG
AATGCGGTGCGGGCGGGGGTCCGGGAGAAGCGCGGGGTGCGGGGACAGGAGAAGCGGAGGAAGATATGTGGGG
CCCCGGCTGAGCCGACGGATTTTGACAGCAAGCAGCGCAGCAACAGGAGGAACTCGAGGCCGAGCATGGGACTGGG
GACAAGCCCCGCGCGCCCGGGGAACGACACCGCGGCTGGGTCCAAGAATGCCTCAGATGGATCAGATGACGAG
GACGAGGAGTGGCCACCCCTGGAGAAGGCTGCCAATGACAGCAGCGGGCCATCATGACAGAGGTGGTTGTGGAC
CCTGAGGATGAGCGTGCCATAGAGATGTTCTATGAACAAGAACCCCTCCTGCCAGGCGCACCCCTGGTGACATCATC
ATGGAGAAGCTGACTGAGAAGCAGACAGAGGTTGAGACAGTCATGTCAGAGGTGTCGGGCTTCCCTATGCCCCAG
CTGGACCCCGGGTCTTAGAAGTGACAGGGGGTCCGGGAGGTATTATCTAAGTACCGCAGTGGAAAACTGCC
AAGGCATTTAAGATCATCCTGCACTCTCCAACCTGGGAGCAAACTCTACGTACAGAGCCGAGGGCCCTGGACT
GCAGCTGCCATGTACCAAGGCCACCAAGATTTTGGCTCTAACCTGAAGGAACGCATGGCCACGCCCTTCTACAAC
CTTGTCCTGCTCCCTCGAGTACGAGATGACGTTGCTGAATACAAACGACTCAACTTCCATCTCTACATGGCTCTC
AAGAAGGCCCTTTTCAAACCTGGAGCCTGGTTCAAAGGGATCCTGATTCCACTGTGCGAGTCTGGCACTTGTACC
CTCCGGGAAGCCATCATTGTGGGTAGCATCATCAACAGTGCTCCATCCCTGTGTGCACTCCAGTGGCCCATG
CTGAAAAATTGCTGAGATGGAATACAGCGGTGCCAACAGCATCTTCCTGCGACTGCTGCTGGATAAGAAGTATGCA
CTGCCTTACCGGTGCTGGATGCCCTAGTCTTCCACTTCTGGGGTTCCGGACAGAGAAGCGTGAAGTGGCTGTG
CTGTGGCACCAGTGCTCCTGACTTTGGTCCAGCGCTACAAGGCCGACTTGGCCACAGACCAGAAAGAGGCCCTC
TAGAACTGCTCCGGCTGACGCCCCATCCACAGCTATCGCCCGAAATCAGGCGTGAGCTTCAGATGCAGTCCCC
CGCGATGTGGAAGATGTTCCCATCACCGTGGAGTGAAGGAAAAACAGTCAGCTGTCTTGGCCAAAGGGGTTTGAAG
GACACCAAGACCCCGTGGTGACTGAAGATGACACTGAGCTTTAATGGCTGAAAGCCAGATCAGGGCAGTGAC
AGATCACAGGGACATCTGTGGCTCCAGTCCAGGACAGGAAGGACTGAGGGTCTGGCTGGTTCCCTCTTCCATT
TAGGCCCTTATCCCTGTTTAGTCTTGAGAGCCAACCTGAGATACCATATGCTAGCAATCCAGTCCCCAGCTGGG
GCTTGGTGTGAGTACTTTTCTATGGCTATTGTGTGAGTCACTGTGGATAAAGGCAAGACAGATATTTATTGA
AAAAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1901

MNKNPFARRTLADIIMEKLTEKQTEVETVMSEVSGFPMQDPRVLEVYRGVREVL SKYRSGKLPKAFKIIIPALS
NWEQILYVTEPEANTAAAMYQATRIFASNLKERMAQRFYNLVLLPRVRDDVAEYKRLNFHLYMALKKALFKPGAW
FKGILIPLCESGTCTLREAIIVGSIITKCSIPVLHSSAAMLKIAEMEYSGANSIFLRLLLDKKYALPYRVLDALV
FHF LGFRTEKREL PVLWHQC LLTLVQRYKADLATDQKEALLELRLQPHQLSPEIRRELQSAVPRDVEDVPI TV
E

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FIGURE 1902

CTTGGGGTGGGGACCGGGTGAGGGGCTGACGGCAGAGTCGGTCCAGAAGTCCCGGACAGCGACGCACAGCGAG
 GAGCCAAAATGGAAGAGGGTGCAAGTCCCTCCTGGGGCCCCAGACGCCCCCTCTTTCTTGCTGCCTGGAGCAG
 GGGCAGTGTCTGTTAGTGCTACTCTCGTGTGAACAGCCATCTTGGCCACCTTCCACAGGAAGCCTGACCTGAA
 GGACAGAAGGAAGGAAGGAGCAGGCTTTGCCAANAATGTCAAGTGCAGAACTCTGGCTGGCCCCCACCAGAAGACAG
 CCCCCAGCCCCAGGATCCAGGTCCACCAGCCAACTCAGACAGTGAATCAGGCCACTCGCCGAGGAGGAGCCTGA
 GGTATACCACTGCTCAGGAATTCCTGTCTCTGCACCTGCTTAGAACCTGGGTTTGACTTTAAACTCATTACAT
 GAGTATTCAATATCTCTCTAGGGGGTCTGTATTGTCAAACAGACTCTAGGGGGCTTTGGCCCCAAGGCGTGAAG
 GGGGTTAAGAAGGGAAAGCATAGAAGGGAAGCTGTTTGGGGTGTGGGGCTCCCGAGCCCTCCCTCAAGGAAGA
 CCACACATGCAGGCATCAGTCAGCTATCCTTGCACCTCAGTGAGGATCTGCAAGGAGGACCCCTCCCAATGGAGGG
 CATGCTTAGAAGTGTCTAGATTGGAGAAGAGGTGGCAATGATGAGGGGGAAAGGAAGGAAGAAAGAAAGAAA
 CCTAGTTTCACTCTCCCTTCTTCCATGCTCTCCAGGGTCTGCACTTCTGAGCTTGGGTTCCCTTTGCCTGG
 ACACCAACCAAGCCCCCACTGGACTGGACTTCAGACCTCCTGCAGCAACTCCCTCCGAGGACATTGATGAGC
 GCTACTGCTTGGCCCTTGGGGAGGAGGAGCGGGCGAGCTGCAGCTTGAAGGACACACTGTGAGAAGTGTAGGAGGTGCTGA
 TGGGACAGGGGGTAGCCCGCTTGGTACTTCCCAAGCTTGAAGGACACACTGTGAGAAGTGTAGGAGGTGCTGA
 AGCCAGGGGAGTACGGAGTGTTCGAGCCCGGGCAGGGGAACAGCGCTGCTGGACACCGCTTGTCTTGCCTGG
 AGCCTGTGTGGCAGGCTGATTAACCTCATCTACTTCTACCATGATGAGCAACTCTACTGGCGCCGCTTGGCG
 CAGAGTGTGCTGCGCCCGCTGCCCCGGCTTGTGACACAGTGTCTTCTCTGGCGCTGCAACGAGGCGAGGAGGAC
 AGCGCTGGCATGAGAACCATTCTGTGTCCAGGACTGCGCCGGGCTTCTGGATGCAAGCTGAGCTGGCGCGGGC
 GGGGAAGCCCTGCTGCCCCAGCTGCTCGAGAACCCTACTCGGATGCAAGCTGAGCTGGCGCGGGGCACTGG
 AAGGGCAGGCATTCTTGGAGCGCCCCACCGCAACCCCGCGCGCGGCTTGGCGCGGGGCACTGCTACCCGCG
 CATCCCTGGCCGGAGCGTTTCAAGGCGCCCGGAACCCACCCCGCGCGCGGCTTGGCGCGGGGCACTGCTACCC
 CTCCAGGCGCGGAGGCGGACGCCCTCTGCTGGAGCGGGGGACCTTGGCGAGGACTTTCGGCGCGCGGCGGCG
 CGCGCAGCGCCAGGGGCTGGCGGGGGGGAGGCTTGGGCTTACCCCACTAGCTGCGGTGTAGCTGACCGAACTGA
 GGAAGGGGAC
 CAAACCTCGGTGAATCTGCAACCTCTCTCCGAACACTCCTTGTCTGCTGCGCGGGTTCAGCCTGCAAACTCAG
 AGGGGGCTGCTGGATCCAGTCCCCAGCAGGAGAACCAGCTGGGGACAAGCGAGGACACCCAAAGGGCAGGAG
 CAATGCGCCCTGGAGACTATTGCTGATCCCAAGGACACCCCTTCTCCACTGCTCTCTCTCTGACTCGGAA
 CCTGAAGGATTTTCTTAGCGAGCGCTTCCCAGTCTTGAAGACCCCGGAAGCTTCAAGCAGAGGACAGC
 AACGCTCTAAGACGCACTGCACCATGTGCTAGTGGCGCAGCTCAGAGAGGGGCTGTAGTGGGAGGAAGGGGT
 CTGTAAAGCGGGAGAACAAGGCTAGCCTCCCCCTCAACATCTAGACTGAGACGAGTACAGGCGCACGCCCGAA
 GAGGCGCGAGGTTGACAAGTTTGGATGCGCCCTTCTTCCCTGCTGAGATAGCCCTTACCCCACTCCACAGCTGGGAC
 TTGGCAAAACCCATTCCCCAAGCTACGCTTCCCCCTGCTGAGATAGCCCTTCAAGACTTTTGGCGGAGACTTT
 AGCCCCGTCCCCCACTCTCTCTCCAAAGCAATTAATGATCAGCAGCGGCTGACAGTTACGGCTGGAGAGC
 CGGAGGTGGGACCGGAGCAGGGGACCGTAGAACCGGGCGCGCTCCTCCCTCTAGAGTCTTGGCGGAGCTTTG
 CAGAGGCGCGTCCCTCTCCGGATGTGCGACTAAGCGAACAGCGCCCCCACTGCGCGCGGTAGCAGCGGAAGT
 GCCAGCCGGAGGTGCGTATTACCGGCGCAGCGGATACGTTTCTTCCGTAATGAACTCCCGAAATACCGGAACACTGGG
 TATGGCTTCCAGCACTGTCCCGGTGAGCGCTGCTGGCTCGGCTAATGAACTCCCGAAATACCGGAACACTGGG
 AGATTGGCTTCCGGGGCTTACCGCTTTGCCACTGATAGGAATGACTTCCGAGGAATTTGATACATAATTTGGG
 ACTCTTTGCTGCGGAGTCTTGGCTGCGGAGAACTTGAGTGACATTGACCTCATGGACCTCAGCGAGGGGTGTA
 GCCAAGTAGTTTCAATGCCACCTGTGCTTATCATCTGATGACAGCAATGGAATCCTGTGCTGAACCCGAAT
 CTTCAAAAAAGACGCTACAATCTGTGACCACCAAGATGTGCCCTGAGTCACCGAGCTTGAATTTGATTCAGATGG
 GCACCTTTCTTCCCTTCCCTGCTAGTTTCTCTTTTGTCTGAGTCACCGAGAATTCATTTCTTGGTCAGC
 AGACAGGCTTAAGCTAAGTATGCTCTATTCTGTAAAGTCTGTACATAGTTCCCAAGCTTCTGACAGGGGGT
 ATTTTGTCTTGTCTGAGAAATAACAGTGCTGTTTTAAAAACAATTTGAAATAACCGCACACAGGAAA
 AAAAAAAAAAAAAA

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FIGURE 1903

MSPQGFAVLISLGSCLDTNQAPNWTGLQTLQLPQQIDERYCLALGEEERAELQLFCARRKQELGQGVARLV
LPKLEGHTCEKCRELLKPGEYGVFAARAGEQRCWHQPCFACQACGQALINLIYFYHGDQLYCGRHHAEELLRPRCP
ACDQLIFSWRCTEAEQQRWENHFCQDCAGPLGGGRYALPGGSPCCPSCFENRYSDAGSSWAGALEGGQAF LGAP
PPHPDPFSLGARSSHRASLAGAFQGPPEPTPRRGRGCGARLP RRGRRTPSGGGGGPWRGLSAAAAARTAQGLGG
AGGWASPLAAV

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FIGURE 1904

CTAGTTAAGGCGGCACAGGGCCGAGGCGTAGTGTGGGTGACTCCTCCGTTCTTGGGTCGCTCGTCTGTGATAC
TGCAGTTTCAAGCATTGCGAGAACCAGCCCCGTCGGGCGGCTCACGGACGAGGCGCCCTCAGTTGCTGCTCC
GACGCGGACCCAGTACCAAGGATTTCTATTGCAGCAGACCATGCTACGAGTGAAGGATCCTAAGAAAGTCACTG
GATTTTTTACTAGAGTTCTTGGAATGAGCTAAATCCAAAAATGTGATTTTCCATTATGAAGTTTCACTCTAC
TTCTTGGCTTATGAGGATAAAAAATGACATCCCTAAAGAAAAAGATGAAAAAATAGCCTGGGCGCTCTCCAGAAAA
GCTACACTTGAGCTGACACACAATTTGGGGCACTGAAGATGATGCGACCCAGAGTTACCAAAATGGCAATTCAGAC
CCTCGAGGATTCGGTCATATTGGAATTGCTGTTCTCTGATGATACAGTGCTTGTAAAAAGGTTTGAAGAACTGGGA
GTCAAAATTTGTGAAGAAACCTGATGATGGTAAAAATGAAAGGCCTGGCATTATTCAAGATCCTGATGGCTACTGG
ATTGAAATTTTGAATCCTAACAAAATGGCAACCTTAATGTAGTGCTGTGAGAAATTCCTTTGAGATTTTCAAG
AAAGGAAACAATGTGATTCAAGATATTTACATACCAGAAGCATCTAGGACTGATGGATCACTGTCCGATTCAAA
TTATTCTTCAGTCCATTCCCTTCCATTTCAGCTGTTCTTTTCACTAACTGTTTCACTATTCTGGTTTCA
AGCAGTGCTTTATCTCATGTCCTTGAATATAGTTGTGTAACCTTTATTTTTAGGTAATAATTAGAACAGTTCCTCT
TCAGAGGCTGCATTTGCCTTCTCTGCCACCTAAATATTACTTCCCTCAAATCTGCCTTTGAATCATCATTTTT
AAAAAAAATTAACATGTTTTTGTGTAGTTATCTTCTGGGGTTTCAATTCCTCAGAAACAACTTTTTCACAAC
GGAAAGGAAAGAACACTAGTGTTCTTTTCAAGTAAAGTACAAAGTGTTTATTTTCAAAAAGAGTAGGTACTCTTGAG
AGCAATTCAAATCATGCTGACAAGGACTGATAGAAAAAGTGATTCTCTTATTATAAAGTACATTTAAAGTT
CAAGGACTAACCTTATTTATTTGGGAAAGGGGAGGAGGAAGGAAATGATATGGTACCCAGACACTGGGCTAGGCT
GCAACTTTATCTCATTTAATACTCCCAGCTGTCAATGTGAGAAAGAAAGCAGGCTAGGCAATGTGAAATCACTTTCA
TGGATTATTAATGGATTTAAGAGGGCATCAATCAGCTCAACTCAAGATTTCATAATCATTTTTAGTATTAGATT
GTGCTTCAAAGTTGTAGTACCTCACAATACCTCCACTGGTTTCTGTTGTAAAAACCTTCAGTGAGTTTGACCAT
TGTGCTCTTGGCTCTTGGGCTGGAGTACCGTGGTGAGGAGTAAACACTAGAAGTCTTTAGTACAAAACCTGCTCT
AGGGACACCTGGTGATTCCTACACAAGTGATGTTTATTTCTCATAAAGAGTCTTCCCTATCCCAAGGTCTTCA
TGATGCCAGTAGCCATATATGATAAAATATGTTTCACTGATAACTTAGTTATCAGAAATCAGCTCAGTGCTCTTCC
CCGCCATGATTCACATTTGATGAGTTTTTAAAAATCAAAGTGATTTTGAATACTCTTAATGGCTCAGAAAAATAA
AACATCCAGTTTGGGATGACTATATTAGATTCTCTAGACTCTAGTGGAAAGACCTTTGGAAAGGCCATGCCAA
CCGTGCTTGTACTGCTAGAAGCACCTTATGTTTTCTTTTGGGTGAAATGGATTATGTGAGTGCTTTAAACAAA
TAGCAATACTTTATAGACTGAAATAAAATGAAACTTCAATAAG

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FIGURE 1905

MAEPQPPSGGLTDEAALSCCSDADPSTKDFLLQQTMLRVKDPKKSLDIFYTRVLGMTLIQKCDFFIMKFSLYFLAY
EDKNDIPKEKDEKIAWALSRSKATLELTHNWGTEDDATQSYHNGNSDPRGFGHIGIAVPDVYSACKRFEELGVKFV
KKPDDGKMKGLAFIQDPDGYWIEILNPNKMATLM

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FIGURE 1906

ATGGGAGCTTCGGACCCGGAAGTGGCGCCTGGGCTCGCGCGGTGCGCGGGGATGGCGGGAGCCGGAGCTGGA
GCCGGAGCTCGCGCGGAGCGGCGCGGGGGTTCGAGGCTCGAGCTCGCGATCCACCGCCGCGCACCCGCGCACAT
CCTCGCCACCCTCGGCTCGGCTCAGCCCTCGGCCCGCAGGATGGATGGCGGGTCAGGGGGCTGGGGTCTGGG
GACAACGCCCCGACCACTGAGGCTCTTTTCGTGGCACTGGGCGCGGGCTGACGGCGCTCAGCCATCCCTGCTC
TACGTGAAGCTGCTCATCCAGGTGGGTCTAGCCGATGCCCCCCACCTTTGGGACCAATGTCTGGGGAGGAAG
GTCCCTCTATCTGCGAGCTTCTTCACTACGCCAAGTACATCGTGCAAGTGGATGGTAAGATAGGGCTGTTCCGA
GGCCTGAGTCCCCGGCTGATGTCCAACGCCCTCTCTACTGTGACTCGGGGTAGCATGAAGAAGGTTTCCCTCCA
GATGAGATTGAGCAGGTTTCCAACAAGGATGATATGAAGACTTCCCTGAAGAAAGTTGTGAAGGAGACCTCCTAC
GAGATGATGATGCAGTGTGTGTCCCGCATGTTGGCCACCCCTGCATGTCAATCAATCGCTGCATGGTCCAG
TTTGTTGGGACGGGAGGCCAAGTACAGTGGTGTCTGAGCTCCATTGGGAAGATTTTCAAAGAGGAAGGGCTGCTG
GGATTCTTCGTTGGATTAATCCCTCACCTCCTGGGCGATGTGGTTTTCTGTGGGGCTGTAACTGCTGGCCAC
TTCATCAATGCCTACCTGGTGGATGACAGCTTACGCCAGGCCCTGGCCATCCGAGCTATACCAAGTTCGTGATG
GGGATTGCAGTGAGCATGCTGACCTACCCCTTCTGCTAGTTGGCGACCTCATGGCTGTGAACAACCTCGGGCTG
CAAGCTGGGCTCCCCCTTACTCCCCAGTGTCAAATCCTGGATTCACTGCTGGAAGTACCTGAGTGTGACAGGGC
CAGCTCTTCCGAGGCTCCAGCCTGCTTTCCGCGGGGTGTCATCAGGATCATGCTTTGCCCTGGAGTAACTGAA
TCACTAAAAAACACGGTCTCAACCTGGCCACCGTGGGTGAGGCCTGACCACCTTGGGACACCTGCAAGACGACT
CCAACCCAAACAACACAGATGTGCTCCAGCCAGCCGGGCTTCAGTTCATATTGCCATGTGTCTGTCCAGAT
GTGGGGTTGAGCGGGGGTGGGGCTGCACCCAGTGGATTGGGTACCCCGCAGACCTAGGGAAAGGTGAGGCGAGGT
GGGGAGTTGGCAGAAATCCCATACCTCGCAGATTGTCTGAGTCTGTCTTGTGCAGAGGGCCAGAGAATGGCTTAT
GGGGGCCCAGGTTGGATGGGAAAGGCTAATGGGGTCAGACCCACCCCGTCTACCCCTOCAGTCAGCCACGCG
CCATCTCGCAGCTCAGCTGGGAGCATCATTTCTCTGCTTTGTACATAGGGTGTGGTCCCTGGCAGCTGGCCACC
ATCATGTCTAGGCCTATGCTAGGAGGCAATGGCCAGCTCTGCTGTGTTTTCTCAACACTACTTTTCTGATA
TGAGGGCAGCACTGCCCTCTGAATGGGAAATCATGCACTACTCAGAATGTGTCTCCTCATCTAATGCTCATCT
GTTTAATGGTGTATGCTCGCGTACAGGATCTGGTTACCTGTGCAGTTGTGAATACCCAGAGGTTGGGCAGATCAG
TGTCTCTAGTCTCTACCCAGTTTAAAGTTCATGGTAAGATTGACCTCATCTCCCGCAATAAATGTATTGGTGA
TTTGAAAAA

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FIGURE 1907

MGASDPEVAPWARGGAAGMAGAGAGAGARGGAAAGVEARARDPPFAHRAHPRHPRPAAQPSARRMDGGSGGLGSG
DNAPTTEALFVALGAGVTALSHPLLYVKLLIQVGHEPMPPTLGTVNLGRKVLYLP SFFTYAKYIVQVDGKIGLFR
GLSPRLMSNALSTVTRGSMKKVFPDEIEQVSNKDDMKTSLKKVVKETSYEMMMQCVSRMLAHLHVISMRMVO
FVGREAKYSGVLSIGKIFKEEGLLGFFVGLIPHLLGDVVFLWGCNLLAHFINAYLVDDSFSQLAIRSYTKFVM
GIAVSMLTYPFLLVGDLMAVNNCGLQAGLPPYSPVFKSWIHCWKYLSVQQLFRGSSLLFRRVSSGSCFALE

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FIGURE 1908

TGTTCTTGAGCCAGCTTCTTCTCGTCTCCACCCAGCTTCCCGGCATTGGAAGAAGGGACCGTCTCTCTCTT
 GTCTTGGCCACCCAAATCCTGGTATCGAAAGGGTTGAACGGACCGGAAGTGTGCAGCAGCGACGGGTCCCCAGCT
 AATCGACGCCGGAAGTAGCAATTACTAGACAAGCATTCCGCCGCCGGCTTCGCTATGGCGGCAATCCCCAGAT
 TCTTGGCAGCCACCAAGCTTTACTTGGAGACAGCATGGGAATCATTGTGCTGGAGCTGTACTGGAAGCATGCT
 CCAAAGACCTGTAAGAACCTTTGCTGAGTTGGCTCGTCGAGGTTACTACAATGGCACAAAATCCACAGAATTATC
 AAAGACTTCATGATCCAAGGAGGTGACCCAACAGGGACAGGTCGAGGTGGTGATCTATCTATGGCAACAGTTT
 GAAGATGAAC TTCATCCAGACTTGAAATTCACGGGGCTGGAATTTCTCGCAATGGCCAATCGGGGCCAGATACC
 AATGGCAGCCAGTTCTTTGTGACCCCTGCCCCACCCAGTGGCTTGACGGCAACACACCATTTTGGCCGAGTG
 TGTGAGGCATAGGAATGGTGAATCGCGTGGGAATGGTAGAAACAACTCCAGGACCGCCCTGTGGACGACGTG
 AAGATCATTAAAGGCATACCTTCTGGGTAGACTTGTACCCCTCTGACAGCTCTTCTGAGATGGCCCCAGTGAA
 CCAGCTTCTAGATGACATAGAATGACATGTAATGCTAAATTTCAATTTTGGCTTTGCAAGTCATGAAGCTTAGGAG
 GCCTGGCATCTTGGGTGAGTTAGAGATGGAAGTACATTTTAATAGGATGCTTCTTCTCTCTCCCCAGTGCCTA
 GGTGTCAGAGCATTGACACAAATGCCCTGTATTATCAATAGGTGACTACTTACTACACATGAACCATAATGCTG
 CTTCTTGTGATGTCTGCTCTGATATACGTGCAACAATGTAGCAGCCACTGTCTATTTCTCAGTGGTTTTGCTTAA
 CCAAATCTCTCTAAGGAGATTTATATTTCTGGCTACACAGCAGTCCCTTGATGGCTGACAGCCACAGAATTC
 AACCAAGTAGTGCTGTGACCCCTCTTAACCTCTGTGACGCCCTATTTCAGTCTTTTACATTTGTTCTTCTAGGG
 AATGTATGCATCTCTATATATATTTCCCTCTCAAACCAACATCAACAGTGTCTGTTTCTGACACTTCAGACA
 TCCACGCAAGCCACATTGAATTTTGGCCAAATGAAAAACACATCCAACAATCAAGTTTCTAAGAAGGTGTCAA
 GTGGGGAATAATAATAATGTATAATAATCAAGAAATTAGTTTATTAAAGGAAGCAGAAGCATTGACCATTTTTT
 CCCAGAGAAGAGGAGAAATCTGTAGTGAGCAAAAGGACAGACCATGAATCCTCTTGAGAAGTAGTACTCTCAGAA
 AGGAGAAGCGCCACTCAAGTTCTTTTAAACCAAGACTTTAGAGAAATTAGGTCCAGATTTTATATGTTTCAGTT
 GTTTATGTATAAAAAATACTTTCTGGATTTTGTGGGAGGAGCAGGAGAGGAAGGAAGTTAATACCTATGTAATA
 CATAGAACTTCCACAATAAAATGCCATTGATGGTTGAAAAA

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FIGURE 1909

MAAIPDPSWQFPNVYLETSMGIIVLELYWKHAPKTCKNFAELARRGYNGTKFHRIIKDFMIQGGDPTGTGRGGA
SIYGKQFEDELHPDLKFTGAGILAMANAGPDTNGSQFFVTLAPTQWLDGKHTIFGRVCQGIGMVNRVGMVETNSQ
DRPVDDVKIISKAYPSG

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FIGURE 1910

CGTCAGAAACCCATGCGGCAGCAAGGCCTGCCGCCGCTCTTCGGCCAGTGGACAGCGAGCAGCTGAGCCGCGAC
TGTGATGCGCTAATGCGGGGCTGCATCCAGGAGGCCCGTGAGCGATGGAACCTTCGACTTTGTACCCGAGACACCA
CTGGAGGGTGACTTCGCCTGGGAGCGTGTGCGGGGCCCTTGGCCTGCCAAGCTCTACCTTCCCACGGGGCCCCGG
CGAGGCCGGGATGAGTTGGGAGGAGGCAGGCGGCCCTGGCACCTCACCTGCTCTGCTGCAGGGGACAGCAGAGGAA
GACCATGTGGACCA~~GCCTGGCC~~AACATGGTGAAATCTCTACTAAAAATACAAAAATTAGCTGGGCATGGTGGTGC
ACGCTTGTAATCCCAGCTACTTGAAGGCTGAGGTGGGAGGATCACTTGAACCCAGGAGGCAGAGTTGCAGTCA
GCTGAGATCATACCACTGTACTCCAGCCTCTTCCAGGGTGACAGTGAGATTCTCAAA~~TAA~~ATACATAAATAA
AAAACCTGTTTGGTAATATCTTCT

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FIGURE 1911

MAGCIQEARERWNFDVFTETPLEGDFAWERVRLGLPKLYLPTGPRRGRDELGGRRPGTSPALLQGTAEEDHVD
QPGQHGEISTKNTKISWAWWCTLVIPATWKAENVGGSLEPRRQLQSAEIIPLYSSLFQGDSEIHLK

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FIGURE 1912

AGCTGAGGTGTGAGCAGCTGCCGAAGTCAGTTCCCTGTGGAGCCGGAGCTGGGCGGGATTGCGCGAGGCACCGA
GGCACTCAGAGGAGGTGAGAGAGCGGGCGGACAGCAACAGGGGACCCCGGGCGGGCCAGAGCCGAGCCAAAGC
GTGCCCGCGTGTGTCCCTGCGTGTCCGCGAGGATGCGTGTTCGCGGGTGTGTGCTGCCTTCACAGGTGTTTCTGC
GGCAGGCGCCATGTCAGAACCCGCTGGGGATGTCCTGAGAACCCATGCGGCAGCAGAGGCTTCCGCGCGCTCTT
CGGCCAGTGGACAGCGAGCAGCTGAGCCGCGACTGTGATGCGCTAATGGCGGGTGCATCCAGGAGGCCCGTGA
CGGATGGAACCTCGACTTTGTACCGAGACACCCTGGAGGGTGACTTCGCTGGGAGCGTGTGCGGGGCTTGG
CCTGCCCAAGCTCTACCTTCCACGGGGCCCCGGCAGGGCCGGGATGAGTTGGGAGGAGGCAGGCGGCTTGGC
CTCACCTGCTCTGCTGACGGGACAGCAGAGGAAGACCATGTGGACCTGTCACTGTCTTGATCCCTTGTGCTCG
CTCAGGGGAGCAGGCTGAAGGGTCCCCAGGTGGACCTGGAGACTCTCAGGGTCGAAAACGGCGGCAGACCAAGCAT
GACAGATTTCTACCACTCCAAACGCCGCTGATCTTCTCAAGAGGAAGCCCTAATCCGCCACAGGAAGCCTGC
AGTCTTGAAGCGCGAGGGCTCAAAGGCCCGCTCTACATCTTCTGCCTTAGTCTCAGTTTGTGTGCTTAATTA
TTATTTGTGTTTAAATTTAAACACCTCTCATGTACATACCTTGGCCGCCCTTCCGCCAGCCTCTGGCAITTA
GAATTTATTTAAACAAAACTAGGCGGTGAATGAGAGGTTCTTAAGAGTGCTGGGCATTTTATTTTATGAAATA
CTATTTAAAGCCTCTCATCCCGTGTCTCTTTTCCCTCTCCCGAGGTGGGTGGCGGGCTCATGCCAGC
TACTTCTCTCCCACTTGTCCGCTGGGTGGTACCCTCTGGAGGGGTGGGTCTCTTCCCATCGCTGTACAGG
CGGTTATGAAATTCACCCCTTTCTGGACACTCAGACCTGAATTTCTTTTTCATTGAGAAGTAAACAGATGGCA
CTTTGAAGGGGCTCACCGAGTGGGGCATCATAAAACTTTGGAGTCCCTCAGCTCTCTAAGGTTGGGCAG
GGTGACCTGAAGTGAGCACAGCCTAGGGCTGAGCTGGGGACCTGGTACCCTCTGGCTCTGTATACCCCTCTG
GTCTTTGTAAGGCAGGGGGAAGTGGGTCTTGAGCAGACACCCCGCTGCGCTCATGGCCCTCTGACCTGC
ACTGGGAGCCCGTCTCAGTGTGAGCCTTTCCCTCTTTGGCTCCCTGTATACCTTTTGGAGAGCCCAAGCTACC
CTTCTCTCCAGCTGGGCTCTGCAATTTCCCTCTGCTGCTGCTCCCTTCTGCTCTTCCCTCTCAGTACCCCTC
TCAGCTCCAGGTGGCTCTGAGGTGCTGTCCCAACCCCAAGCTCAATGAGCTGGAAGGGGAAGGACACA
CAAGAAGAAGGGCACCTAGTTCTACCTCAGGCAGCTCAAGCAGCAGCCGCCCTCTCTAGCTGTGGGGTGA
GGGTCCCATGTGGTGGCACAGGCCCCCTTGAAGTGGGTATCTCTGTGTTAGGGGTATATGATGGGGAGTAGAT
CTTCTAGGAGGAGACACTGGCCCTCAAATCGTCCAGCGACCTTCTCATCCACCCATCCCTCCCCAGTTCA
TTGCACCTTTGATTAGCAGCGGAACAGGAGTCAGACATTTAAGATGGTGGCAGTAGAGGCTATGGACAGGGCAT
GCCACGTGGGCTCATATGGGGCTGGGAGTAGTTGTCTTTCTTGGCACTAAGCTTGAGCCCTTGGAGGCAGTGAAG
TGCTTAGTGTACTTGGAGTATTGGGTCTGACCCCAACACCTTCCAGCTCTCTGAACATACTGGCCTGAGCTGT
TTCTCTCGGCTCCCATGTGCTGCTTCCGTTTCTCCACCTAGACTGTAAACCTCTCGAGGGCAGGGACCA
ACCTGTACTGTCTGTGCTTTACAGCTCTCTCCACAATGTGAATATACAGCAGGTGCTCAATAAATGATTCT
TTAGTGACTTTAAAAAAAAAAAAAAAAAAAA

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FIGURE 1913

MSEFAGDVQRNFCGSKACRRLEFGPVDSEQLSRDCDALMAGCIQEARERWNFDFVTETPLEGDFAWERVRLGLPK
LYLFTGPRRGRDELGGGRRPGTSPALLQGTAEEDHVDLSLSCTLVPRSGEQAEGSPGGPGDSQGRKRRQTSMTDF
YHSKRRLIFSKRKP

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FIGURE 1914

AATAAAGGCGAGGAGAAGCGGGTGGTCCGCCATTTCGTGGACGCCGGGTGAGTGAGAGAGTTGGTTGGTGTGGG
CCGGAGGAAAGCGGGAAGACTCA TCGGAGCGTGTGGATTGAGCCGCCGCATTTTTAAACCTAGATCTCGAAAT
GCATCGTGATTCCGTGCCATTGGACTGTAAGTTTATGTAGGCAATCTTGGAAACAATGGCAACAAGACGGAAAT
GGAAACGGGCTTTTGCTACTATAGGACCACTCCGAAGTGTGTGGGTTGCTAGAAACCCACCCGGCTTGTCTTTTGT
TGAATTTGAAGATCCCCGAGATGCAGCTGATGCAGTCCGAGAGCTAGATGGAAGAACACTATGTGGCTGCCGTGT
AAGAGTGGAACTGTGCAATGGTGAAAAAGAAAGTAGAAATCGTGCCCACTCCCTCTTGGGGTCGTGCCCTCG
AGATGATTATCGTAGGAGGAGTCTCCACCTCGTCGCAGAGTCAACATCATGTCTCTCTCACCACCCCTCGAAT
CTGCATTAGCCAGTCAACTAGCCCTTTACGCGTCATGTGACCAGCGCGCCCAATTCAGCTTGGCTGGTGTCTGTT
CACATGACCCAGGCTGGCCAGTCTGCAGTTGCACCGCCCTTTGGTTCCCGAGCATGCTGTTTTCTCAGCCCTT
CTCTCCAACCTTAACCAAAATCGGCAGCAGCCACTCGACCGCCACACATTCTCGGCAATCAGCTCAGCTGTTT
ATTTACCAAAATGTCTTACAACAACCTACAGCAGCAGCCTTCGGCTAACAAAAAGCAGGAAAAATCCACAACACC
CCCTTCGCCAACCAACTAAATCCAACGCAACATCTGGCAAAACCTTTTTCAGCAAAATCTTCCTGGCCGTGAGTCC
GGCAGCCTCACTCACCATTCTTAGCTTGTGAAACCCAAAACCTAATCTCCAAGAAGGAGAAGCTTCTCTGCAG
CCGGAGCAGGTCCCTTTCTAGAGATAGGAGAAGAGAGATCGCTGTCTCGGGAGAGAAATCACAAGCCGTCCCG
ATCCTTCTCTAGGTCTCGTAGTCGATCTAGGTCAAATGAAAGGAAATAGAAGACAGTTTGAAGAGAAGTGGTGT
ACAGGAAATTACTTCAATTTGACAGGAGTATGTACAGAAATTCAGTTTGTGTTAGAGCTTCATAAGCTTGGTGC
ATTTTTAAGATGTTTGTAGCTGTCAAATCTGTTTGTCTCTTGAACAGTGACACAAGGTGTAATTTCTCATGGT
TTGAAATGGATCATACGAGGCAATGTAATACCAAGAATTTGTACTTTTACAAATGTCCCTTAACGCAAAATGAAATTT
GCTTTGAACTTTTAGTTATGCACAGACTGATAATAAACCTCTAAACCTGCCACGCGGAAGTGTGTTTTTTTTAA
ATTTAAATACAGAAACAACCTGGCAAAATTTGAACCTAAGATTTACTTTTTTCCATAGCTGGGATATAGGCTGCA
GCTATAGTTGAAACAGCAGTCTTTAAAAACCTGCTGTGAAACACAGGCCATCAGGGAACAGCAATGCTGCACTAT
TAAATTAGAGGTTTTTGAAGAAATCCAACCTCTCATCTCGGGCAGAGGTTGCCTAGTTGGTATAGAATGTTAAGTTT
CAAGAAAGTTTACCTTTGCTTTTAGGTCATAAGTTCCCTATTGATTGCTGTATATGGATACATGGCTGTGCTGA
CATTTCTTATGTGCAAAATTTGTGATTTCAAAAATGTCTGCCAGTTTAAAGGGTACATTGTAGAGCCGAACCTTGA
GTTACTGTGCAAGATTTTTTTTTCATGCTGTCAATTTGTAATATGTTTTGTGAGAAATCCTTGGGATTAAGTTTTG
GTTACAAATTTGTTCTTTAACTTGAAGCCTGTTTTTCCCTGCAAACTCAAATCTGTGAGCTTGGTACCAAGTCCA
GGTATAACATTCCTATTGGAAGCCATACTTATATTTTCTTGTAAAGTGCTTTTGAATTAATAAAATATTAGCATA
ATTGTGTATAGTCAGTTGAACCCACTGTTACCATTGTCTTATCCCATGGGAAGCAGTTGGTTACACGATTCTTA
TTTTATAAGAAACAGCTGAGAGGCACTATGGATTAGTCTTCTGAAGTGAAGGAAATATAGATGTCACTAAGTGA
TAGTTAAACCAATTTTTTTTTTAGGCAATAGAAGCCAGTTTCAGGTCCTCAATATTTTAGTGACCAACATTTTA
AAGTATAGCAGCAACCTGGTTCTTTAAACACAAAGTAAAGTTGCCCATTAACAAATGGCTTTTATCTTTAGCATGAA
AACTTTCCACAGGTCTAAAAATTGCTTCCATTTTATAATTTGAGGTGTTGCATGGGAATTTCAAGCTGATCCATC
ATGATGTAAAGTTCACAAATAGGTTCAAATGTAAACAGTCGAGAAATGAAATAGGAGGCATGCATAACCTTCCTC
TTAGAAATGGCAGGTGTTGTATTTCAAATTTTTGTGCAATTAGATTAAATCATATGCAACAGT

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FIGURE 1915

MHRDSCPLDCKVYVGNLGNGNKTLELAFGYGYGLRSVWVARNPFGFAFVEFEDPRDAADAVRELDGRTL¹CGCR
VRVELSNGEKRSRNRGPPPSWGRPRDDYRRRSPPPRRRVTIMSLTTL

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FIGURE 1916A

GGTCTCACCCATGAGCGGAAAGTGCTTGGCGCTCCAGGCCGAAAGAAAAGGACCAAGGCCAAGAAGGACAAAGCC
 CAAAGGAAATCTGAAACTCAGCACCAGAGGCTCTGCTCCCACTCTGAGAGTGATCTACCAGAGCAGGAAGAGGAG
 ATTCTGGGATCTGATGATGATGAGCAGAAGAATCCTAATGATTATTGTAAGGAGGGTTATCATCTTTGTGAAAAATT
 GGAGATCTATTCAATGGGAGATACCATGTGATCCGAAAGTTAGGCTGGGACACTTTTCAACAGTATGGTTATCA
 TGGGATATTGAGGGAAGAANAATTTGTGGCAATGAAAGTAGTTAAAGTGCTGAACATTACACTGAAACAGCAGCAT
 GATGAAATCCGGTTGCTGGAAGTGCATGCAATTCAGACCCCTAATGATCCAAATAGAGAAATGGTTGTTCAACTA
 CTAGATGACTTTAAAATATCAGGAGTTAATGGAACACATATCTGCATGGTATTGGAAGTTTGGGGCATCATCTG
 CTCAGTGGATCATCAATCCAATTATCAGGGGCTTCCACTGCCTTGTGTCAAAAAAATATTACAGCAAGTGTTA
 CAGGGTCTTGATTATTACATACCAAGTCCGGTATCATCCACTGACATTAAACAGGAGAACATCTTATTGTCA
 GTGAATGAGCAGTACATTCCGAGGCTGGCTGCAGAAGCAACAGAATGGCAGCGATCTGGAGCTCTCCGCTCTCC
 GGATCTGCAGCTCAGTACTGCTCCAGCCCTAAACAGCTGACAAAATGTCAAAAGATAAGAAGAAGAAATGAAG
 AAGAAGCAGAAGCGCCAGGCAGAAATAC TAGAAGAGCGAATGCAGGAAATGAGGAAATGGAGAAAGAGCTCGGGC
 CCTGGGCAAAAAGACCAACAGCAAGAAGAATCAGAGAGTCCCTGTTGAAAGACCCCTTGAAGAGAACCCACCT
 AATAAAATGACCCCAAGAAAACCTGAAGAGTCAAGTACCATTGGCCAGGATCAACAGCTTATGGAACGTGATACA
 GAGGTTGGTGCAGCAAGAAATTAATGCAATGGAGTGATTGAAGTCATTAATTATCTCAGAACAGTAATAATGAA
 ACATTGAGACATAAAGAGGATCTACATAATGCTAATGACTGTGATGCCAAAATTTGAATCAGGAATCTAGTTTC
 CTAAGCTCCCAAAATGGAGACAGGCAGCATCTCAAGAACAGACTCTGTACACCTTAACACTCTGAGGTGTCA
 GACACCATGGTGTGCCAGTCTTCTCAACTGTAGTCACTTCAGTGAAACAACACATTAGCCACATTCAAGAA
 AGCATTTCGGGCAGAGATACCTCTGTAAGATGAACAAGGCAAGAACATAACGGACCCTGGGACAAACAAAGGAAA
 TCCACGGCTGGAAATTTCTTGTAAATCCCTTGAGCCAAAAAATGCAGAAAAGCTCAAGGTGAAGATTGCTGAC
 CTGTGAAAGCTGTGTTGGCACAACCAATTTCACTGAAGATATCAAAACAAGGCAATATCGTTCCTTGGAAAGTTCTA
 ATCGGATCTGGCTATAATACCCCTGTGACATTGGAAGCAGCGCATGCTAGGCTTTGAATGGCCACAGGTGAC
 TATTTGTTTGAACCTCATTGAGGGGAAGAGTACACTCGAGATGAAGATCACATTGCAATCATAGAACTTCTG
 GGGAAAGGTGCCCTCGCAAGCTCATTGTGGCAGGAAAATTTCCAAGGAATTTTTCACCAAAAAGGTGACCTGAAA
 CATATCAGGAAGCTGAACCTTGGGGCCCTTTTGAAGTTCTAGTGGAGAAAGTATGAGTGGTCCGAGGAAGAGGCA
 GCTGGCTTACAGATTCTTACTGCCCATGTTGGAGCTGATCCCTGAGAAGAGAGCCACTCGCCGCGAGTGTCTC
 CGGCACCCCTGGCTTAATCTCCATAGCCCCCTGGCCAGCACCCAGCAGAGATCACACACTGACCTCCGCGCTTCC
 CCTTCAAGCATTTTCTCTCTCCCTTTTCAGGGTGAAGCTCTTCTCTCAAGAGTTTCTAGATCTGTTTTTTTTTT
 AATCCAAGATGTTCAATTTGGGTTTGTCTTACTTGACCTGTGGAGATCCCCACAGCACTGGGCACTCTAGGTGAA
 TTTGGCCTTGGTTGGGCTCTGCCAAAGACTAATGGACTAAAATGTGAAACAGCCCTTGTGCCCTTACCTTTCTCT
 CCCATTAGGACATCCTTTAAATATAAGCATCCTTTTGAAGAGCTATGAAGGTGATAGAGCCCATCTTTTATA
 TTCATTGACTCTAAGAGTCAAATTTTCTAGTGATATCCTATTGCGCAGCATAGGATGAGGAGGGGAAGGGTCA
 TTAATTTCTATGTACAGCAGAGACATTAACCTTGCTGTGTCGGGCTGCATCATCTTCTGGAGCTGTTCTGTGTG
 TCTCTGTGTTGCATTTTCTCGCACTTTTAAAGCTTTTAAAGTACTGATCTGATTTCTGATTTCTTCCAAACAG
 GGTACCATTTTATCACTGTTCAAAGCACTGCAAAATCTTTCATCCTTTAATAGTTAAGATCTTTGAATCTTCA
 GTCTGATTTTAAATGAAGCAAAACAGAAAGTGAATAGTAATTTCTTGAGAGCCAGGTGTTCTATAAACA
 GTCCTTTCTGTATGTCTTCTTATACCCTAAGACCAGAGTTATTTGGTTGGTTGTTTGTGTTTATTTTGTGTT
 TTGATATCATGGCTGGCATTTACTCATTGCACTTGAGTTATTGCCCATAGACTAAGAGATCAGGATGATGGTA
 GAACGAGATCTGGGTTTCAGAGTTTCCCATTTAAGAAAATAGATCTTGAGATCTGATTTCTTCTTCCAAACAG
 TCCCTGCTTTTATGTCAGAGCTTTTCTTACCTTACCCAAAATCTGGCTTGAAGCAGTTTCTCTATGGCT
 TTGGCTTTCTGATTTTCTCAGAGCTCGAGTCTTAAATATAACCCCAATGAAAGAACCAAGGGAGGGGTGGGA
 TGGCATTTTTTTTGGTGTGCTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTT
 TCTCTGCTGCTATTTCCCTACATAATGTCAATTTTAAACATAATTTGACATGATTGAGATGTACTTGAGGCTT
 TTTTGTGTTTAAATGAGAAAGACTTTGCAATTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTTTGTGTT
 ACATATTTCTCCAGTAAGTAATACTGAAGAGCAAAAGAGAGGCAGGATTGGGGTCAAGCCGCTTCTTCAGCAT
 GACCAAGTGGGCTTGGGATTGCGAGCTTCTCGAAGTGGCTGTAGGACTGCAATTTACAGAAAGTACAGAAAGC
 GCAACTTGAGGCTCTGCTAGCAAGCCACAGTAGGAGTATTTGGTAACCCACTTTCTATACAGGAGATTGGAATC
 TACTTGTGCTATTATCCACCACAGTGACAAAGGAAAGTGGTGGCTTATGCAATCCATTTAATCATATAACATA

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FIGURE 1916B

TTACTCTGAGTAAC TGGCCAGCCATT CATCGGATCCTTCATTGGGTACTCCTGAAATCAGACATGTTCTCTGTAGA
AAGAATTTTAAAGTTAGGCTTTCTATGCACCTATCAAGAATCAAGAGAATAGATTGTATCAAACAACGGCAGGGAA
ATCCTTCAGCAATTCTAATCCACTTTGGGTTTTAGCTGTTTTACATCTAAAGCAATAGACTAGAAGTGAATTA
TCTTCTACATAGTAAAAATCACAATTGTGGAATTACAGGAATCTGGTGATATTAAAGGTGAATAACAAAACACAA
AAGGCCCTATTTTAAACAGTTGATGTGACAGTAAGTTTTAATAGAACCTGTAACCTCATTTTGGAAATGCTTCTCC
ACCAATAAGGGCTTTTCCCTATTTAAGGAGCCAGATGGATTGAAAGATGTGGAAATAGGCAGCTGTAGATCT
TGATCTCCAGGTACCCCATGTACCTTTATTGAGCTTAATTATAATACTGTCAAATTGCCACGATCTCACTAAAG
GATTTCTATTTGCTGTCAGTTAAAAATAAGCCCTAAATACATTTTATCTTTCTACTGAGGGCATGTCTGTT
TCTTTGTAAATGCCGTACAATAAACAAATTATTTAATAACCTA

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FIGURE 1917

MERKVLALQARKKRTKAKKDKAQRKSETQHRGSAPHSESDLPEQEEELGSDDEQEDPNDYCKGGYHLVKIGDL
FNGRYHVIRKLGWGHFSTVWLSWDIQGKFVAMKVVKSAEHYTETALDEIRLLKSVRNSDPNDPNREMVVQLLDD
FKISGVNGTHICMVFEVLGHLLKWIISNYQGLPLPCVKKIIQQVLQGLDYLHTKCRIIHTDIKPENILLSVNE
QYIRRLAAEATEWQORSGAPPPSGSAVSTAPQPKPADKMSKNKKKKLKKKQKQAELEKRMQEIEMEKESESGPGQ
KRPNKQEESESPVERPLKENPPNKMTQEKLEESSTIGDQTLMERDTEGGAAEINCNGVIEVINYTONSNNETLR
HKEDLHNANDCDVQNLNQESSFLSSQNGDSSTSQETDSCPTITSEVSDTMVCQSSTVGSFSEQHISQLQESIR
AEIPCEDEQEHNGLPNDKCKSTAGNPLVNPLEPKNAEKLKVKIADLGNACWHKHFTEDIQTRQYRSLEVIGLS
GYNTPADIWSTACMAFELATGDYLFEPHSGEETRDEDHIALIIELLGKVPRKLIVAGKYSKEFTFKKGDCLKHIT
KLKFWGLFEVLVEKEYEWSQEEAAGFTDFLLPMLLELPEKRATAAECLRHPWLNS

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FIGURE 1918A

GGCGCGGCTCGCGGCGCTGCCAGTCTCGGGCGGCGGTGTCGCGCGCGGGCGGCTGCTGGCGGGCTGAAGG
GTTAGCGGGACACGGGCGAGAGTGACGGAGTCGGCGAGCCCGCGGGCGACAGGTTCTCTACTTAAAG
ACAAAGTACTACTGATGAGGTGCCAAGAACAATGAAGAAAGCCACAGCCACTGTGTGCTAGCAGGGAGAGAT
ATTACCTCCAAAAGACAGCGGGGATTTAAAGATTGTCAAAGAGTGGGGAATGGTGAGGAACCGCGATGATT
GGAGACAAAGTTTATGTGCCATTCAAAGGAAAATGTCAAATGGAAGAAGTTTGATTCCAGTCATGATAGAAT
GAACCATTTGTCTTTTGTCTTTGGCAAAGGCCAAGTCATCAAGGCATGGGACATTGGGGGTCCATCATGAAGAA
GGAGAGATATGCCATTTACTGTGCAACCAAGAATATGCATATGGCTCGGCTGGCAGCTCTCCCTAAATTCCTCG
AATGCAACTCTCTTTTTTGAGATTGAGCTCCTTGATTTCAAAGGAGAGGCAACAGTAGAAATCCACCTGGAAGGC
CGGAGAACCACCGGAAGGAGGAGGATATTCAAATCCAAACGAAGGCAACAGTAGAAATCCACCTGGAAGGC
CGCTGTGGTGAAGGATGTTGACTGCAGAGATGTGGCATTCAGTGTGGCGGAGGAGAAGACCACGACATTCCA
ATTGGAATTGACAAGCTCTGGAGAAAAATGCAGCGGGAAGAACAATGTATTTTATATCTTGGACCAAGATATGGT
TTTGGAGAGCGAGGGAAGGCTAAATTTGGCATTGAACCTAATGCTGAGCTTATATGAAGTTACACTTAAGAGC
TTCGAAAAGGCCAAAGAACTCTGGGAGATGGATACCAAGAAAAATGGAGCAGGCTGCCATTGTCAAAGAGAAG
GGAACCGTATACTTCAAGGGAGGCAAAATACATGCAGCGGTGATTCAAGTATGGGAAGATAGTGCTCGTGGTAGAG
ATGGAATATGGTTTATCGAAAAAGGAATCGAAAGCTTCTGAATCAATTCCTCTGCTGCCCTTCTGAACTTGGCC
ATGTGCTACCTGAAAGCTTAGAGAATACCAAAAGCTGTGAATGCTGTGCAAGGCCCTTGGACTGGAGCATGGC
AATGAGAAAGGCTTGTATAGGAGGGGTGAAGCCAGCTGCTCATGAACAGTTTGAGTCAGCCAAAGGTGACTTT
GAGAAAGTGTCTGGAAGTAAACCCCGCAATAAAGCTGCAAGACTGCAGATCTCCATGTGCCAGAAAGGCCAAG
GAGCACAAAGCGAGCGGACCGCAGGATATACAGCAACATGTTCAAGAAAGTTTGCAGAGCAGGATGCCAAGGAAG
GCCAATGAAGCAATGGGCAAGAAGACTTCAGAAGGGGTCACTAATGAAGAAGGAACAGACAGTCAAGCAATGGA
GAAGAGAAACCTGAGGGCCAGCTATGAGCGCCACGCCAAGGAGGGAAGACTCCCGCTCACTCCCTCTCAA
TGGGCTTTCGCCCACTCAGGACAGAACAGTGTTTAAATGAAGTTTGTATAGTCTATGTGATTCTGGAAGCAA
ATGGCAAAACCGTAGCTTCCCAAAACAGCCCGCTGCTGCTGCCGGAGGGTTCAGTGAGGGGTGGCAGCGGA
CCACTCCAGGTGGAACAAACAGAAATGACTGTGGTGTGGAGGAGTGAGCCAGCAGCTTAAGTCCAGCTCATTTC
AGTTTCTATCAACCTTCAAGTATCCAATTGAGGTCCTCGAGATCATCTTAACAATGTGGGGCTGTAGGTTT
ACCTTTGAACCTTTCATAGCACTGCAGAAACCTTTTAAAAAAGTCTCATGAATTTCTCCTTTCTACAGTTG
GGTAGGGTAGGGGAAGGAGGATAAGCTTTTGTTTTAAATGACTGAAGTGTATAAATGTAGTCTGTGCTATT
TTAACCAACAGAACCCACAGTAGAGGGGCTCATGTCTCCCGAGTCCACAGCAGTGTCAAGACGTGAAAGCCA
GAACCTCAGAGGCCACTTGCTTGCTGACTTAGCCTCTCCAAAGTCCCGCTCTCAGCAGCCTCTCTGTGAG
GTGGCTTCTACCAACACAGCGCTGCTCTGGGGAGTAATCTGTCTATCTTCAAAACACCTTCAAGCATGATA
ATGAGCAGATGAGATTCTCTGATTAGCTTTTCTATTTTCGATGAAGTTCTGAGATCAATACACAGTACTTCTCTCC
CAATCAAAATTTGCTTTTTTCTCCCTCTCTATCTCTTTTATGGGAATAATATTCAATACACAGTACTTCTCTCC
AGCATTGCTACTGCTCAGCTTCTTCTTCAITCTAATCCTTGCTATTAAGAATTTAAGACTTTGCTTACAATAT
TTTTGACCTGGAGTGGATCTATTACATAGTCAITTTAGTCAATTTTACCTCCTCTATGCAAAAAAATTTTGAATTT
GCTCATAGCATATGTATCTGGTTTATGGAACCTTTTATGACCTTCACTGCAATGCAATGCAATGCAATGCAAT
TAGCTATAGCTTAAATTTTAAAAACAAATCTGATGTTGACAAATAAATAGTTGCTCTTCACTACAGGGGT
TTACCTGCAGGTTTGAACGAGTGTCTCGCTTTTCTCGCCTGTCAAGCTTCTGTCTGCTGCTGAGTTGTG
AAAGAGTTGAAGACAGCTTCCATGCCGTACACAGCCAGTAGCCATAATCCAGTACTTGAAGTGGACCTGCTC
ACTAGGGCAAGCTTAAATGTGTACATGTAGTTGAATTTAGTCCTTACGGGTAAACAGATTTGAGCATGGCTCTC
TATTTCTCCAGCCTTAAGAAACACTCTGGGAATGCAATTTGGCAACCAAGGAACCAATTTGCTTAAACCTGGAACA
CTCACCTTTTAAATCTTAAAAACACTGGCAGTTATATTTTAAATAGTTTATTTTATGATGGTTTATCTATC
TCCCATGGAACAAATGGGATCAATTTGTGAGTTTTTCTTTTAAATGATTAACATTAATTTCTTATTAATCTTTCT
TGATGTTTTGCTTTTATGAAATATTTCTTTTAAAGAGGCTGTAGAGCATGGTTCAGTAGGCCAAGATTGAAATTTG
ATACTAAAAAGGCCACTAGTATGTTTTGAGATAACAAACAAAGAAAGCTATCCAGACTCAGATGATGCCAGCTG
TCTCCACGCTGTGTAATATGGTTCAACAGGGGAAGCTGGCAAAAGTGTGTGGGAGGGGAGGGGTGTGAGT
GGTTCTGAGCAAAATACACAGGGTGCCATTACCACTCAAGAAGCACTTCACGTATTTCTGTATCAAAATCAA

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FIGURE 1918B

TAATCTTAAACAATTTGTGTAGAAGTCCACAGACATCTTTCAACCACCTTTTAGGCTGCATATGGATTGCCAAGT
CAGCATATGAGGAATTAAAGACATTGTTTTAAAAAAAAAAAAATCATTAGATGCACTTTTTGTGTGTTCTTTA
AATAAATCCAAAAAATGTGAAAAAAAAA

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FIGURE 1919

MTTDEGAKNNEESPTATVAEQGEDITSKKDRGV LKIVKRVNGEETPMIGDKVYVHYGKLSNGKKFDS SHDRNE
PFVPSLGKGQVIKAWDIGVATMKKEICHLLCKPEYAYGSAGSLPKIPSNATLFFIEI LLDPFKGEDLFEDGGIIR
RTRRKGE GYSNPNEGATVEIHLEGRCGGRMFDCRDVAF TVGEGEDHDIPIGIDKALEKMQREEQCILYLGPRYGF
GEAGKPKFGIEPNAELIYEVT LKSF EKAKESWEMDIKEKLEQAATVKEKGT VYFKGGKYMQAVIQY GKIVSWLEM
EYGLSEKESKASESFLLA AFLNLAMCYLKLREYTKAVECCD KALGLDSANEKGLYRGEAQLLMNEFESAKGDFE
KVL E VNPQNKAARLQISM CQKKAKEHNERDRRIYANMFKKFAEQDAKEEANKAMGKKTSEGV TNEKGTDSQAMEE
EKPEGHV

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FIGURE 1920

CGCCACCATGGTGTGCGTGAACGTCCTGGCCGATGCTCTCAAGAGCATCAACAATGCCGAAAAGAGGGCAAACG
CCCAGTGCITATTAGGCCGTGCTCCAAACTCATCGTCCGGTTTCTCACTGTGATGATGAAGCATGGTTACATTGG
CGAATTTGAAATCATTGATGATCGCAGAGCTGGGAAAATTGTTGCGAACCTCACAGGCAGGCTAAACAAGTGTGG
AGTGATCAGCCCCAGATTCGGTGTGCAACTCAAAGATCTAGAAAATGGCAGAATAATCTGCTTCCATCCCACCAG
TTTGTTTCATGTACTGACAACCTCAGCTGGCATCATGGACCATGAAGAAGCAAGACGAAAAACACACAGGAGGG
AAAATCCTGGGATCTTTTCTAGGGATGTAATACATATATTACAAATAAAATGTCTCATGGAAAAAAGAAA
AAAGACAGGAAAAAAAAAAAAAAAAAAAAAT

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[illegible]

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FIGURE 1922

GCGGCGTGAGAAGCCATGAGCAGCAAAGTCTCTCGCGACACCCGTGTACGAGGCGGTGCGGGAAGTCCTGCACGGG
AACCAGCGCAAGCGCCGCAAGTTCCCTGGAGACGGTGGAGTTGCAGATCAGCTTGAAGAATATGATCCCCAGAAG
GACAAGCGCTTCTCGGGCACCCTCAGGCTTAAGTCCACTCCCGCCCTAAGTTCTCTGTGTGTCTCGGGGGAC
CAGCAGCACTGTGACGAGGCTAAGGCCGTGGATATCCCCACATGGACATCGAGGCGCTGAAAAAACTCAACAAG
AATAAAAACTGGTCAAGAAGCTGGCCAAGAAGTATGATGCGTTTTTGGCCTCAGAGTCTCTGATCAAGCAGATT
CCACGAATCCTCGGCCAGGTTTAAATAAGGCAGGAAAGTTCCTTCCCTGCTCACACAACGAAAACATGGTG
GCCAAGTGGATGAGGTGAAGTCCACAATCAAGTTCCAAATGAAGAAGGTGTTATGCTGGCTGTAGCTGTTGGT
CACGTGAAGATGACAGACGATGAGCTTGTGTATAACATTACCTGGCTGTCAACTTCTGGTGTCAATTGCTCAAG
AAAAACTGGCAGAATGTCGGGCCTTATATATCAAGAGCACCATGGGCAAGCCCGCGCTATATTAAGGCACA
TTTGAATAAATTCTATTACCAAGTTC

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FIGURE 1923

MSSKVS RDTLYEAVREVLHGNQRKRRKFLETVELQISLKNYDPQKDKRFS GTVRLKSTPRPKFSVCVLGDQQHCD
EAKAVDIPHMDIEALKKLKNKKLVKKLAKKYDAFLASESLIKQIPRILGPGLNKAGKFP SLLTHNENMVAKVDE
VKSTIKFQMKKVLCLAVAVGHVKMTDDELVYNH LAVNFLVSLKKKNWQNVRALYIKSTMGKPQRLY

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FIGURE 1924

GTGAGTTTACCCCTATGAGACTGTGAGAGGCCCGGGGCTACCTCAAAGGAGCGGGTTCGCGAAGCTAGCTAGCA
GCGGCCCCCTCCAGGTCGCCGGGCCGCGCGCGCGGCTTGTTGTGAAGAGCGGGGAACGGGGTGTC
CGGTCCCCGCCATGAGGGCATGGACGTAGACCTGGACCCGAGCTGATGCAGAAGTTACGCTGCCTGGGCACCA
CCGACAAGGACGTGCTCATCTCCGAGTTCAGAGGCTGCTCGGCTTCCAGCTCAATCCTGCCGGTTCGGCCTTCT
TCCTGGACATGACCAACTGGAACCTACAAGCAGCAATTGGCGCCTATTATGACTTTGAGAGCCCAACATCAGTG
TGCCCTCTATGTCTTTGTTGAAGATGTCACCATAGGAGAAGGGGAGTCAATACCTCCGGATACTCAGTTTGTAA
AAACATGGCGGATCCAGAATTTCGGGGCAGAGGCTTGGCTCCAGGGGTTTGTCTTAAATATGTGGGGGAGACC
AATTGGACATGTGAACATGGTGATGGTGAGATCGCTAGAGCCCCAAGAGATTGCAGATGTCAGCGTCCAGATGT
GCAGCCCCAGCAGAGCAGGAATGTATCAGGGACAGTGCGGGATGTGCACTGCTACAGGACTCTACTATGGAGATG
TCATCTGGGTGATTCTCAGTGTGGAGGTGGGTGGACTTTTAGGAGTAACGCAGCAGCTGTCATCTTTTGAACGG
AGTTC AACACACAGCCGCATCGTAAGGTAGAAGGAACTTCAACCTTTTGCTCTCCCCAAAAGAACCGACAAT
CAGATGAAAACTTAAAGACCCCTGGGGCTCCGAGTTCGACTCGATCAGCAAAAACACATGGGCTCCTGCTC
CTGACACATGGGCTCCTGCTCCTGACCAAACTGAGCAAGACCAGAATAGACTGTCACAGAACTCTGTAAATCTGT
CTCCAGCAGTACGCAAACTTATCAGTAGTGACTTACAGTAAGGGGCTCCATGGGCTTACCCCTTCGGCC
AGTCTTAAACGGGTGTCAGCAAAAAAAAAAAAAAAAAA

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FIGURE 1925

MEGMDVDLDPELMQKFSCLGTTDKDVLISEFORLLGFQLNPAGCAFFLDMTNWNLQAAIGAYYDFESPNI SVPSM
SFVEDVTIGEGESIPPDTOFVKTWRIQNSGAEAWPPGVCLKYVGGDQFGHVNMMVRSLEPQEIADVSVQMCSPS
RAGMYQGQWRMCTATGLYYGDVIWVILSVEVGLLGVTQQLSSFETEFNTQPHRKVEGNFNPFASPQKNRQSDEN
NLKDPGGSEFDSISKNTWAPAPDTWAPAPDQTEQDQNRLSQNSVNLSPSSHANNLSVVTYSKGLHGYPYFGQS

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FIGURE 1926

GGCACGAGGGGGTGAGGGTCTGCCTGCCTGTTTCTGTCTGGGTGICTGAGTTCCAAAAATGTGTGTTGTTTGT
 CCTCTCATCTCTTCTGAGACTGTTGTTTTTTAGAGCTTGATTGTGGGAGAAAAGCTTGTGTGAAATTCCTC
 TTCACCTCCCCACCCCCAAAAATAAAAGGGGGCATAAACITTTATTCACCTGGAGAAGCCCTGGGGGTGGCTGG
 AGCCAGCCTGCTGAGAAGCGTGGTGCAGCTGGGCTGGGACTTCACTAGAGCTTACTCTGGAGCACCTATTTTCT
 GTGCACATGGGAGTGCTCCACTCCCTAGCAGCAGCAGGGAAGTCTCTGCCAGGTACCCACGCCACAGGCTCAG
GATGGCTTTTTGTCTGAGGGCTCATTAGGCCAGACTGCTGCTGCTGGTACCAGTCTCCTGAGACACTGCCTCC
 CTGGAGCCCATGCATGCCAGCTGTTCTTACTGCTTAGTAGCCTTGAAGCAGCACATCTCCACTGTCCCTGGCAG
 GATTGTGGGAGGCTTACAAACCCCTGCTTCTGACTTCTCTTCTGCCAACACTGGGTGCCCTTCCCAGTTT
 CCCAGCAGGGGCTTCATGGGCCACCGTCAGTGGGTCTGGGCCTGCCAGAGTCGTCTTGCTCTTCTCTTGCTTCT
 AGGCAACACACTTGGCAAGTTAAATGTCCCAAGCACCTTGCTCTCCCTTCCCAAGAACAAACCAATTTCTGTGCAC
 ATCCTTGGAGGCGAGATGAGCTCCTTGCAAGGGCCAGAGTAAGTGCAAGTCATGGAGTGCAGGCAGAGGGGTCC
 ATGGCTTCCCCAGCCCAGGGAGGGTATCAGTATCATTCTCTCTCTCCCTCACTGGTATGGGTTCAGAGCAAT
 GCCTAGGGCCCTCTCTGCTCCCTGCCTAGTGGGGTGGTAGTGGCTACCTCTCAGCCCCAATAGTCCCTGCTCC
 TCTTAGAATCTTCACCAAGTGGCAGGCCACCTCTGGGCGAGGACCACTGCGTCTGGCACCAGGAGGTGAGGCAG
 ACACCATGGTTAGGTGATAGGGTCTGAACCCAGTGGGGAGACAGAGGGGTTCACTTGGGAAGAATCTGTCAG
 TGTGCAATGGAGTGAGGTGTGTGTGTGGATGGATGTGACGTGTGCATGCTTTTTTCTTTTTTGCCGTGAGGAC
 AGTTGAATTTGGGGCATTTTTCTACAAGAAGCAGTCAGCCTTCTCTCCCCATAAGGACTGGCTGTAACCTTAAG
 CCCATCAAAGTTACTTCCAGCCTGGAGAGAACCTCACCAACAGCTGGTGTGGCCTGAGGGTGGCCATGGTGGGA
 AATGGGCATGAGAATAAATACCTCCCCAAATTCATCTGAGCCAGCAGGAGAGGATGGTAGGGTGGCCAGGGCT
 CAGAAGTGCAAGCTGATTACTCACCCCCACCTGCGCTCGCCGACCTTTCTTTGTTTCTTGGGTGAATGCAGGA
 GCACAGTGGCTGCCCTTCCACCTGGACAGTGGTGTGTGTAGAAAGCCAGCTGGATGTTTGTGGTGGGGCTCA
 TGGTGCTTAGGAGGAGATAAAGATGAGGAGGTTTTTCTTATTGTATAAATGAATATTTGTATGATTAAATTAAC
 ACACACACCAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1927

MAFCLRASLGPDCCWYQSPETLPPWSPCMPSCSYCLVALKQHISTVPGRIVGGFTTPAFLTSSSAQHVVPLPSF
PAGASWATVSGSGPARVVLLFLLLLGNHTWQVKCPKHLVSLPKNKPFLECTSLEAR

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FIGURE 1928

AGAGTCGTCTTGCTCTTCCTCTTGCTTCTAGGCAACCACACTTGGCAAGTTAAATGTCCCAAGCACCTTGTCTCC
CTTCCCAAGAACAACCAATTTTTCTTTTGCCGTGAGGACAGTTGAATTTGGGGCATTTTTCTACAAGAAGCA
GTCAGCCTTCTCTCCCCATAAGGACTGGCTGTAACCTTAAGCCCATCAAAGTTACTTCCAGCCTGGAGAGAACC
TCACCAAACAGCTGGTGTGGCCTGAGGGTGGCCATGCTGGGAAATGGGCATGAGAATAAATACCTCCCCAAATTC
AATCTGAGCCCAGCAGGAGAGGATGGTAGGGTTGCCAGGGCTCAGAAATGCAAGCTGATTACTCACCCACCCCTG
CCTCGCCGACCTTTCTTTGTTTCTTGGGTGAATGCAGGAGCAGCAGTGGCTGCCCTTCCCACCTGGACAGTG
GTGTGTGTAGAAAGCCAGCTGGATGTTGTGGTGGGGCCTCATGGTGCCTAGGAGGAGATAAAGATGAGGAGGTT
TTTCCTTATTGTATAAAATGAATATTTGTATGATTAAATTACACACACACCAAAAAA

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FIGURE 1929

GTCTGACTTCCTCCCAGCACATTCTGCACTCTGCCGTGTCCACACTGCCCCACAGACCCAGTCTCCAAGCCTG
CTGCCAGCTCCCTGCAAGCCCTCAGGTTGGGCCTTGCCACGGTGCCAGCAGGCAGCCCTGGGCTGGGGGTAGGG
GACTCCCTACAGGCACGCAGCCCTGAGACCTCAGAGGGCCACCCCTTGAGGGTGGCCAGGCCCCCACTGGCCAAC
CTGAGTGCTGCTCTGCCACCAGCCCTGCTGGCCCTTGGTTCGCTGGCCCCCAGATGCCTGGCTGAGACACGC
CAGTGGCCTCAGCTGCCACACCTCTTCCCGGCCCTGAAGTTGGCACTGCACAGACAGCTCCCTGGGCACCAG
GCAGCTAACAGACACAGCCGCCAGCCAAACAGCAGCGGCATGGGCAGCGCCAGCCCGGGTCTGAGCAGCGTATC
CCCCAGCCACCTCTGCTGCCCCCCGACACGGTGTGCGGGACAGGCTTGGAGAAGCGGCAGCGGGGGCAGTGGG
TCTCGAGAGACGGGACTGGAGTCCAGTCCACCCGCCACGCCGAGCAGGGCCTGTCCGCTTCTACCTCTCCTA
CTTTGACATGCTGTACCCTGAGGACAGCAGCTGGGCAGCCAAGGCCCTGGGGCCAGCAGTCCGGAGGAGCCACC
TGAGGAGCCTGAGCAGTGCCCGGTTCATTGACAGCCAAGCCCCAGCGGGCAGCCTGGACTTGGTGCCCGGGGCT
GACCTTGGAGGAGCACTCGCTGGAGCAGGTGCAGTCCATGGTGGTGGGCGAAGTGCTCAAGGACATCAGACGGC
CTGCAAGCTGCTCAACATCACCGCAGATCCATGGACTGGAGCCCCAGCAATGTGCAGAAGTGCTCCTGTGGAC
AGAGCACCAATACCGGCTGCCCCCCATGGGCAAGGCCCTTCAGGAGCTGGCGGGCAAGGAGCTGTGCGCCATGTC
GGAGGAGCAGTTCGCCGACGCTCGCCCTGGGTGGGATGTGCTGCACGCCACCTGGACATCTGGAAGTCAGC
GGCCTGGATGAAAGAGCGGACTTCACCTGGGGCGATTCACTACTGTGCTCGACCAGTGAGGAGAGCTGGACCGA
CAGCGAGGTGGACTCATCATGTCCGGGACGCCATCCACCTGTGGCAGTTCCCTCAAGGAGTTGCTACTCAAGCC
CCACAGCTATGGCCGCTTCATTAGGTGGCTCAACAAGGAGAAGGGCATCTTCAAATAGGAGCTCAGCCAGGT
GGCCCGGCTGTGGGGCATCCGAAAGAACCGTCCCGCCATGAACACAGCTGAGCCGCTTCATCCGCCAGTA
TTACAAGAAGGGCATCATCCGGAAGCCAGACATCTCCACGCGCTCGTCTACAGTTCTGTGCACCCCATCTGAGT
GCCTGGCCAGGGCCTGAAACCGCCCTCAGGGGCTCTCTCCTGCTGCCCTGCCTCAGCCAGGCCCTGAGATG
GGGGAAAACGGGCAGTCTGCTCTGCTGCTGACCTTCCAGAGCCAAAGGTACAGGAGGGGCAACCAACTGCCCC
AGGGGGATATGGTCCCTTGGGGCCTTCGGGACCATGGGGCAGGGGTGCTTCCCTCCTCAGGCCAGCTGCTCCCC
TGGAGGACAGAGGGAGACAGGCTGCTCCCAACACCTGCTCTGACCCAGCATTCCAGAGCAGAGCCTACAG
AAGGGCAGTGACTCGACAAAGGCCACAGGCAGTCCAGGCCTCTCTGCTCCATCCCCCTGCCTCCCACTTGTGA
CCACACCTGGCATGGTGACAGGAGACATCTGCACCCCTGAGTTGGGACGCCAGGAGTGCCCCCGGAATGGATAA
TAAAGATACTAGAGAACTG

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FIGURE 1930

MGSASPGLSVSPSHLLPPDTVSRITGLEKAAAGAVGLERRDWSPPPPATPEQGLSAFYLSYFDMLYPEDSSWAA
KAPGASSREEPPPEEPEQCPVIDSQAPAGSLDLVPGGLTLEEHSLEQVQSMVVEVLKDIETACKLLNITADPMDW
SPSNVQKWLWTIEHQYRLPPMGKAFQELAGKELCAMSEEQFRQSPPLGGDVLHAHLDIWKSAAWMKERTSPGAIH
YCASTSEESWTDSEVDSSCSGQPIHLWQFLKELLLKPHSYGRFIRWLNKEKGIFKIEDSAQVARLWGIRKNRPAM
NYDKLSRSIRQYYKGGIIRKPDISQRLVYQFVHP I

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FIGURE 1931

CGGCGGCCGAGCTCGCGCATCCAGCCATCACTCTTCCACCTGCTCCTTAGAGAAGGGAAGATGAGTGAGTCGAG
CTCGAAGTCCAGCCAGCCCTTGGCCCTCCAAGCAGGAAAAGGACGGCACTGAGAAGCGGGGCCGGGCGAGGCCGCG
CAAGCAGCCTCCGGTGAGTCCCGGGACAGCGCTGGTAGGAGTCAGAAGGAGCCAGCGAAGTGCCAAACCTAA
GAGACCTCGGGCCGACCAAAGGGAAGCAAAACAAGGGAGAAGGAGGAAGAGGAGGCGATCTCGCAGGAGTCCT
CGGAGGAGGAGCAGTGAACCATGCGTGCCGCTGCTCCTCACTGGAGGAGCAGCTTCTTCTGGGACTGGACAGC
TTTGCTCCGCTCCACCGCCCCACCCCTTCCCAGGCCCCACCATCACCACGCGCTCTGGCCGCCACCCCCATCT
TCCACCTGTGCCCTCACCACCACACTACACAGCACACAGCCGCTGCAGGGCTCCCATGGGCTGAGTGGGGAGCA
GTTTTCCCTGGCCTCAGTTCCAGCTCCCCCGCCCCACCCACGCATACACATGCCCTCCTGGACAAGGCTAA
CATCCCACTTAGCCGACCCCTGCACCTGCTGCGTCCCCACTCCCTTGGTGGTGGGGACATTGCTCTCTGGGCTTT
TGGTTTGGGGCGCCCTCTCTGCTCTTCACTGTTCCCTCTGGCTTCCCATAGTGGGGCTGGGAGGGTCCCCT
GGCCTTAAAAAGGGGCCAAGCCCCATCTCATCTCGGCAGGCCCTACTCCTAGTCCCTGGCAGCAGAGGTGTGGC
CAATGGAGGGGGTGCTGGCCCCAGGATTCCCCAGCCAACTGTCTTTGTACCCAGTGGGGCTCACTTTTCA
TCCCTCCCCAAGTTCCTAGTCCCGTACTAGGTTGGACAGCCCCCTTCGGTTACAGGAAGGCAGGAGGGGTGAG
TCCCTACTCCCTTTCACTGTGGCCACAGCCCCCTTGCCTCGCCTGGGATCTGAGTACATATTGTGGTGATG
GAGATGCAGTCACTTATTGTCCAGGTGAGGCCCAAGAGCCCTGTGGCCGCCACCTGAGGTGGGCTGGGGCTGCTC
CCCTAACCTTACTTTGCTTCCGCCACTCAGCCATTTCCCCCTCCTCAGATGGGGCACCAATAACAAGGAGCTCAC
CCTGCCGCTCCCCAACCCCTCTGCTCCTCCTGCCCCCAAGGTTCTGGTTCCATTTTCTCTGTTTACAA
ACTACCTCTGGACAGTTGTGTTGTTTTTGTTCATGTTCCATTCTTCGACATCCGTCAATTGCTGCTGCTACAG
CGCCAAATGTTCACTCTCATTGCTCCTGTTCTGCCACGATCCCTCCCCAAGATACTTTGTGGGGAAGAG
GGGCTGGGGCATGGCAGGCTGGGTGACCAGTACCCAGTCCAGGGAAGGTGGGGCCCTGCCCTAGGATGCTG
CAGCAGAGTGAGCAAGGGGGCCAAATCGACCATAAAGGGGTAGGGGCCACCTCCTCCCCCTGTTCTGTTGGGG
AGGGGTAGCCATGATTTGTGCCAGCTGGGCTCCCTCTCTGTTTCTATTGTGAGTTACTTGAATAAAAAAAA
TATCTTTTCTGG

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FIGURE 1932

GGTGGCCACAGCAACTTCTCTAGAGGGAGCTGATTGGAGCCGGGTGCCGCTGGCACCTCTATGATCACTGGA
GTCTCGCGGGTCCCTCGGGCTGCACAGGGACAAGTAAAGGCTACATCCAGATGCCGGGAATGCACTGACGCCCAT
TCCTGGAAGTCTGGGCTCCACTCAGCCCTGGGAGCAGCAGCCGACGCCCTCGGGACCTCCATCTCCACCTG
CTGAGCCACCCGGGTTGGGCAGGATCCCGGCAGGCTGATCCGCTCTCCACTGAGACCTGAAAAATGGCTTCGG
GGCAAGGCCACGGTCTCCCAAGCAGGAGTGCAGGAGGCTGCCCTGCCCTCTGCTTCTGCGAAGCAGGAGGCT
GAAGGGTGGCTGCCCTGCCAGCCAGAGATGGTCACTTACCTCTGCAACCTACAGCAACCATGGGGCAGGTGG
GACGGCAGCTCGCCATCATCGGGGACGACATCAACCGACGCTATGACTCAGAGTTCAGACCATGTTGCAGCACC
TGCAGCCACCGGCAGAGAATGCCTATGAGTACTTCACCAAGATTGCCACCAGCCTGTTTGAGAGTGGCATCAATT
GGGGCCGTGTGGTGGCTCTTCTGGGCTTCGGCTACCGTCTGGCCCTACACGCTTACCAGCATGGCCCTGACTGGCT
TCCTAGGCCAGGTGACCCGCTTCGTGGTCGACTTCATGCTGCATCACTGCAATTGCCCGGTGGATTGCACAGAGGG
GTGGCTGGGTGGCAGCCCTGAACCTTGGGCAATGGTCCCATCTGAACGTGCTGGTGGTTCTGGGTGTGGTTCTGT
TGGGCCAGTTTGTGGTACGAAGATTCTTCAAAATCATGACTCCCAAGGGTGCCCTTTGGGGTCCCGGTTGAGACCC
CTGCCTGGACTTAAGCGAAGTCTTTGCGCTTCTCTGTTCCTTGCAGGGGTCCCCCTCAAGAGTACAGAAGCTTT
AGCAAGTGTGCACTCCAGCTTCGGAGGGGCCCTGCGTGGGGGCCAGTCAGGCTGCAGAGGCACCTCAACATTGCA
TGGTGCTAGTGGGCCCTCTCTCTGGGCCCAGGGGCTGTGGCCGCTCTCCTCCCTCAGCTCTCTGGGACCTCCTTAG
CCCTGTCTGCTAGGCCCTGGGGAGACTGATAACTTGGGGAGGCAAGAGACTGGGAGCCACTCTCCCCAGAAAGT
GTTTAACGGTTTTAGCTTTTTATAATACCTTGTGAGAGGCCATTCCCACCATCTACCTGAGGCCAGGACGCTCT
GGGGTGTGGGGATTGGTGGGTCTATGTTCCCAAGGATTCACTTCTGGAAGATCAGCAACCTTAAGAGATGGGA
CTAGGACCTGAGCCTGGTCTCGGCCCTCCCTAAGCATGTGCCAGSAGCAGGACCTACTAGGAGAGGGGGGCCA
AGGTCTGTCTCAACTTACCCTGTCCCATCTCCTCCCTCCGGCCATCTGCGCTTGCAGTTGAGACTCTCAGGGA
TTCCTGGGCTTGGGGTGTGGGGTGGGGTGGAGTGCAGACCAGAGCTGTGTAAGTCAAGTGTGCAAGCCCTCAA
GCCTGCCTCCCAAGGTCTCTCAGTTCTCTCCCTTCTCTCTCTCTATAGCACTTGCTCCCAACCAATTCACCTA
CAGGTGAAGGCTCTCAGCCCATCCCTGGGGGCTTGGGTGAGTGGCCTGCTAAGGCTCTCCTTGCCAGACTA
CAGGGCTTAGGACTTGGTTTGTATATCAGGGAAGAGTGGGAGTTCACTGGAGGGTTCTAAGTGGGAGAA
GGACTATCAACACCACTAGGAATCCCAGAGGTGGGATCTCCCTCATGGCTCTGGCACAGTGTATCCAGGGGTG
TAGATGGGGGAAGTGTGAATACTGAACTCTGTTCCCCCACCCTCCATGCTCTCACTGTCTAGGTCTCCTCAG
GGTGGGGGTGACAGTGCCTTCTCTATTGGGCACAGCCTAGGGTCTTGGGGGTGAGGGGGAGAAAGTTCTTGATT
CAGCAAATGCGAGGAGGGGAGGCAGATGGAGCCATAGGCCACCCCTATCCTCTGAGTGTGGAATAAAT
GTGCAATCCCTC

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FIGURE 1933

MGQVGRQLAIIIGDDINRRYDSEFQTMLQHLQPTAENAYEYFTKIATSLFESGINWGRVVALLGFGYRLALHVVYQH
GLTGFLGQVTRFVVDFMLHHCIARWIAQRGGWVAALNLGNPILNVLVVLGVLLGQFVVRFFKS

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FIGURE 1934

GGCCGGAGCCGTGCGAGTTCTCTACCCTGCTTCGCGAGCGGGCGAGAGAACGCGAGTCCCAGGATCCCCGGCACC
CAGITCTCTTCCACTGCATGATTTTTCCTTTGACCGGGTATTCACCCAGGAAGTGGACAGGATGAAGTGTITGA
AGAGATTGCCATGCTTGTCCAGTCAGCCCTGGATGGCTATCCAGTATGCATCTTTGCCTATGGCCAGACAGGCAG
TGGCAAGACCTTACAAATGGAGGGTGGGCCTGGGGGAGACCCCCAGTTGGAGGGGCTGATCCCTCGGGCCCTGCG
GCACCTCTTCTCTGTGGCTCAGGAGCTGAGTGGTCAGGGCTGGACCTACAGCTTTGTAGCAAGCTACGTAGAGAT
CTACAAATGAGACTGTCCGGGACCTGCTGGCCACTGGAACCCGGAAGGGTCAAGGGGGCGAGTGTGAGATTGCGCCG
TGCAGGGCCAGGGAGTGAGGAGCTCACTGTCACCAATGCTCGATATGTCCTGTCTCCTGTGAGAAAAGTGGGA
CGCCCTGTTCATCTGGCCCGCCAGAAATCGGGCTGTGGCCCGCACAGCCCAGAATGAACGGTCATCAGCAGCCA
CAGTGATTTCCAGCTACAGATTTCTGGGGAGCACTCCAGCCGAGGCCTGCAGTGTGGGGCCCCCTCAGTCTTGT
GGACCTGGCCGGGAGTGAGCGACTTGACCCGGCTTAGCCCTCGGCC

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FIGURE 1935

MDPQRSPLLEVKGNIELKRFLIKAPSQLPLSGSRLKRRPDQMEDGLEPEKKRTRGLGATTKITTSHPVPVSLTTV
PQTQGGTTAQKVSKKTGPRCSTAIATGLKNQKPVPAVPVQKSGTSGVPPMAGGKKPSKRPAWDLKGQLCDLNAEL
KRCRERTQTLDOENQQLQDQLRDAQQVKALGTERITTEGLAKVQAQAEQQQELKNLRACVLELEERLSTQEG
LVQELQKKQVELQEERRGLMSQLEEKERRLQTSEALSSQAEVASLRQETVAQAALLTEREERLHGLEMERRRL
HNQLQELKGNIRVFCRVFVLPGEPTPPPGLLFPSPGGGSPDPPTRLSLRSRDERRGTLGAPAPPTRHDFSPD
RVFPFGSGQDEVFEEIAMLVQSALDGYPCIFAYGGTGSGKTFMEGGPGGDPQLEGLIPRALRHLFSVAQELSG
QGWTYSFVASVEIYNETVRDLLATGTRKGQGGCEIRRAGPGSEELTVINARYVPVSCKEVDALLHLARQNRA
VARTAQNERSRSHSVFQLQISGEHSSRGLQCGAPLSLVDLAGSERLDPGLALGPGERERLRETQAINSSLSTLG
LVIMALSNKESHVPYRNSKLTLYLLQNSLGGSAKMLMFVNISPLEENVSESLNSLRFASKVNCVIGTAQANRK

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FIGURE 1936

CTCTCGGCTTTCGGCTCGGAGGAGGCCAAGGTGCAACTTTCTTCGGTCATCCTGAATCTGGGTTCATCCGACACC
AGCTGCCTCCACCATGCCACCGAAGTTTCGACCCCAACGAGATCAAGGTCGTATACCTGAGGTGCACCAGAGGTGA
AGTCGGTGCCACTTCTGCCCTGGCCCCCAAGATCGGCCCTGGGICTGTCTCAAAAAGGTTGGTGATGACAT
TGCCAAGGCCAAGGGTGACTGGAAGGGCTGAGGATTACAGTGAACTGACCATTGAGAACAGACAGGCCAGAT
TGAGGTGGTGCTTCTGCCTCTGCCCCGATCATCAAAGCCCTCAAGAAACCACCAAGAGACAGAAAGAAACAGAA
AAACATTAAACACAATGGGAATATCACTTTTGATGAGATCGTCAACATTGCTCGACAGATGCGGCACCGATCCTT
AGCCAGAGAACTCTCTGGAACCATTAAAGAGATTCGGGGACTGCCAGTCTATGGGCTGTAATGTTGATGGCCA
CCACCTCATGACATCATAGATGACATCAACAGTGGTGTGTGGAATGCCAGCTAGTTAAGCACAAAGGAAAAT
ATTTCAATAAAGGATCATTGACAACCTGGT

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FIGURE 1937

GTTCGCGGGGGCGGCCGAGGGGGAAGAGTGTGTGTCTGCGGGAGAAAAGAGGAGAATCACCCAAGCGGCTCAG
AAGTCCCAGGGAGTGGAGGCCCTGCCATGGAGCCGTGTGTGTATGTGTGGTAACACCATGTCTGTGCCCTTGC
TCAACGATGCTGCCACCGTGTCTGGAGCTGAGCGGGAACGGCCGTGGTTATTTTTTACATGGACTTGGAGACA
CAGGGCACAAGCTGGGCTGAGCCCTCTCCACCATTGGGCTCCCTACGTCAGTACATCTGTTCCCATGAGCCTA
GGATCCTCTGTGACCTCAACATGAAGATGGTGATGCCCTCCTGGTTGACCTGATGGGGCTGAGTCCAGATGCC
CAGAGGACGAGGCTGGCATCAAGAAGGCAGCAGAGAACATCAAGGCCTTGATTGAGCATGAAATGAAGAACGGGA
TCCCTGCCAATCAAATCATCTGGGAGGCTTTTACAGGGCCGGGCCCTGTCCCTCTACATGGCCCTCACCTGCC
CCCACCTCTGGCTGGCATCCTGGCTTTGAGCTGCTGGCCGCCCTCTGCACCGGGCCTTCCCCAGGCAGCTAATG
GCAGTGCCAAGGACCTGGCCATCTCCAGTGCCATGGGGAGCTGGACCCCATGGTGCCCGTACGGTTTGGGGCCC
TGATGGCTGAGAAGCTCCGGTCTGTTGTACACCTGCCAGGGTCCAGTTCCAGACATACCTGGGTGTCTATGCACA
GCTCCTGTCTCAGGAGATGGCAGCTGTGAAGGAATTTCTTGAGAAGCTGCTGCCCTCCTGTCTAACTAGTCGCTG
GCCCCAGTGCAGTACCCAGCTCATGGGGGACTCAGCAAGTAAGCATGGCACCATCTTGGGTCTGAGCTGGTCGA
GCCCTGTCCCCACCTTCTCTGACCTGTCCTTTTCCACAGGCCTCTAGGGGCAGGTGGCAAGGCCTGGCTGGGC
CTTCTTCTCTGGCCTCAGCCACCTGGCTCTGTCTGCAGTAGGGGCAGGCTGCTTTCTTATCCCATTTCCTGGAG
GCGGGCCCCCTGGCAGCAGTATTGGAGGGGCTACAGGCAGCTGGAGAAAAGAGGCCAGCCACTGACCCACTCAC
TCAGGACCTCACTCACTAGCCCCACTTTGGGCCCTCTCTGTAACCTTAGGGTTTGGCCCATGGGGCCCTCCAG
GCCCTGCCCCAAGTATTCTGCCAGATAATCTTGCTCTCCTGCCTCCACTCAGCTGCTTCTCAGTCATGAAC
GTGGCCATGGCCCCGGGGTCCCCCTTGTCTGTCTGGGCTCCCTGTCCCTGGGCAGGAGTCTGTGTGAGGAGTGG
AGCCTTTTGAGGGGGCCTTCCCTCAGCTGTTTCCCCACACTGGGGGCTGGGCCCTGCCTCCCCGTTACCCCTCC
TTCCTGCAAGGCCCTGGAGCCTGTAGGGCTGGACTGAGGTTTCTGAGTCTCCCCCAGCTGTCTCACCCTTCTTGT
CCCCACTCTAGAGCAGGGAGGCAGTGGGGGAGGAGTTGTGTCTTGTCTTCTGTCTCATGTGGTTTTTGGGTGTT
TTTCTTCTGTCTCTGGATTCTGATAAAATTAAGAAATGTCTTCCTC

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FIGURE 1938

GTGTGCTCGGGAGAAAGAGGAGAATCACCCAAGCGGCTCAGAAGTCCCAGGGAGTGGAGGCCCTGCCATGG
AGCCGTGTGGTGTATGTGTGTTAACACCATGTCTGTGCCCTGCTCAACGATGCTGCCACCGTGTCTGGAGCTGA
GCGGGAACGGCCGTGGTTATTTTTTACATGGACTGGAGACACAGGGCACAGCTGGGCTGACGCCCTCTCCAC
CATTCGGCTCCCTCAGTCAAGTACATCTGTCCCATGAGCTAGGATCCCTGTGACCCCTCAACATGAAGATGGT
GATGCCCTCCTGTCAAGGCCTTGATTGAGCATGAAATGAAGAACGGGATCCCTGCCAATCAAATCATCTGGGAG
GCTTTTACAGGGCCGGGCCCTGTCCCTCTACATGGCCCTCACTGCCCCACCCCTCTGGCTGGCATCCTGGCTT
TGAGCTGCTGGCCGCTCTGCACCGGGCTTCCCCAGGCAGCTAATGGCAGTGCCAAGGACCTGGCCATCCTCC
AGTGCCATGGGGAGCTGGACCCCATGGTGCCCGTACGGTTTGGGGCCCTGATGGCTGAGAAGCTCCGGTCTGTTG
TCACACCTGCCAGGGTCCAGTTCCAGACATACCTGGGTGTGATGCACAGCTCCTGTCTCAGGAGATGGCAGCTG
TGAAGGAATTTCTTGAGAAGCTGCTGCCTCCTGTCTAAGTAGTCGCTGCCCCAGTGAGTACCCAGCTCATGG
GGGACTCAGCAAGTAAGCATGGCACCATCTTGGGTCTGAGCTGGTCGAGCCCTGTCCCCACCTTCTTGACCTG
TCCTTTTCCACAGGCCTCTAGGGGCAGGTG

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FIGURE 1939

GAAAGAGGAGAAATCACCCAAGCGGCCTCAGAAGTCCCAGGGAGTGGAGGCCCTGCCATGGAGCCGTGTGGTGTA
TGTTGGTAACACCATGTCTGTGCCCTGCTCAACGATGTGCCACCGTGTCTGGAGCTAGCGGGAAACGGCCG
TGTTATTTTTTACATGGACTTGGAGACACAGGGCACAGCTGGGCTGACGCCCTCTCCACCATTCGGCTCCCTC
ACGTC AAGTACATCTGTTCCCATGAGCCTAGGATCCCTGTGACCCCTCAACATGAAGATGGTGATGCCCTCCTGGT
TTGACCTGATGGGGCTGAGTCCAGATGCCCCAGAGGACGAGGCTGGCATCAAGAAGGCAGCAGAGAACATCAAGG
CCTTGATTGAGCATGAAATGAAGAACGGGATCCCTGCCAATCAAATCATCCTGGGAGGCTTTTACAGGGCCGGG
CCCTGTCCCTCTACATGGCCCTCACCTGCCCCACCCCTCTGGCTGGCATCCTGGCTTTGAGCTGTGGCCGCCTC
TGCACCGGGCCTTCCCCAGGGTCCAGTTCCAGACATACCTGGGTGTGATGCACAGCTCCTGTCTCAGGAGATG
GCAGCTGTGAAGGAATTTCTTGAGAAGCTGCTGCCCTCTGTCTAACTAGTCGCTGGCCCCAGTGCAGTACCCAG
CTCATGGGGGACTCAGCAAGTAAGCATGGCACCATCTTGGGTCTGAGCTGGTCGAGCCCCGTGCCCCACCTTCC
TGACCTGTCTCTTTTCCACAGGCCTCTAGGGGCAGGTGGCAAGGCCTGGCTGGGCCCTTCTCTGGCCCTAGCC
ACCTGGCTCTGTCTGCAGTAGGGGCAGGCTG

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FIGURE 1940

GTTATTTTTTTACATGGACTTGGAGACACAGGGCACAGCTGGGCTGACGCCCTCTCCACCATTGGGCTCCCTCAC
GTCAAGTACATCTGTTCCCATGAGCCTAGGATCCCTGTGACCCCTCAACATGAAGATGGTGATGCCCTCCTGGTTT
GACCTGATGGGCTGAGTCCAGATGCCCCAGAGGACGAGGCTGGCATCAAGAAGGCAGCAGAGAACATCAAGGCC
TTGATTGAGCATGAAATGAAGAACGGGATCCCTGCCAATCAAATCATCTGGGAGGCTTTTCACAGGGCCGGGCC
CTGTCCCTCTACATGGCCCTCACCTGCCCCCAGCTGTCTCACCCCCACTTTGTCCCCACTCTAGAGCAGGGAGGC
AGTGGGGGAGGAGTTGTCTTTGTCTTCTGTCTCCATGTGGTTTTTGGGTGTTTTTCTTCTTGTGTCTCGGATTCT
TGATAAAATTAAAGAAATTGCTTCCTC

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FIGURE 1941

ACATGAAGATGGTGATGCCCTCCTGGTTTGACCTGATGGGGCTGAGTCCAGATGCCCCAGAGGACGAGGCTGGCA
TCAAGAAGGCAGCAGAGAACATCAAGGCCTTGATTGAGCATGAAATGAAGAACGGGATCCCTGCCAATCAAATCA
TCCTGGGAGGCCTTTTCAGGGCCGGGCCCTGTCCCTCTACATGGCCCTCACCTGCCCCACCCCTCTGGCTGGCA
TCCTGGCTTTGAGCTGCTGGCCGCCCTCTGCACCGGGCCTTCCCCAGGCAGCTAATGGCAGTGCCAAGGACCTGG
CCATCCTCCAGTGCCATGGGGAGCTGGACCCCATGGTGCCCGTACGGTTTGGGGCCCTGATGGCTGAGAAGCTCC
GGTCTGTGTGCACACCTGCCAGGGTCCAGTTCCAGACATACCTGGGTGTATGCACAGCTCCTGTCTCTCAGGAGA
TGGCAGCTGTGAAGGAATTTCTTGAGAAGCTGCTGCCCTCTGTCTAACTAGTCGCTGGCCCCAGTGCACTACCCC
AGCTCATGGGGGACTCAGCAAGTAAGCATGGCACCATCTTGGGTCTGAGCTGGTCGAGGCCCTGTCCCCACCCTT
CCTGACCTGTCCTTTTCCACAGGCCTCTAGGGGCAGGTGGCAAGGCCCTGGCTGGGCCTTCTTCTCTGGCCTCAG
CCACCTGCCCTCCACTCAGCTGCTTCTCAGTCATGAACGTGGCCATGGCCCCGGGGGTCCCCCTTGCTGCTGTGGGC
TCCCTGTCCCTGGGCAGGAGTGTCTGGTGAGGAGGTGGAGCCTTTTGGGGGGGCCTTCCCTCAGCTGTTTCCCA
CACTGGGGGGCTGGGCCCTGCCCTCCCCTTACCTCCTTCCCTGCAGGCCTGAGCCTGTAGGGCTGGACTGAGG
TTCAGGTCTCCCCCAGCTGTCTACCCCCACTTTGTCCCCACTCTAGAGCAGGAGGAGCTGGGGGAGGAGTTG
TGTCTTGTCTTCTGTCTCCATGTGGTTTTTGGGGTGTCTTCTTCTGTGTCTGGATTCTGATAAAATTAAAGAA
ATTGCTTCCTC

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FIGURE 1942

CGGCACGAGGCGGTGGGAGTGGGAAGGAAGGCGGAGGGAACCATGCGAGTTCTGAGAATTGCGGCGAGGGTCGC
CTCGAGAGACGGTTTCTGAGCAGGAATTCTGAAATCCCCACCCTCTCCTCCCTCGGGGGATTGATCCCCTATG

GCCACCGCTAACAGCATCATCGTCTGGATGATGATGACGAAGATGAAGCAGCTGCTCAGCCAGGGCCCTCCCAC
CCACTCCCCAATGCGGCCTCACTGGGGCAGAAGCCCCCTAGCTCCTCTGAGCCTCATGGGGCCAGAGGAAGCAGT
AGTTCCGGGCGGCAAGAAATGCTACAAGCTGGAGAATGAGAAGCTGTTGGAAGAGTTCCTTGAACCTTTGTAAGATG
CAGACAGCAGACCACCTGAGGTGGTCCCATTCTCTATAACCGGCAGCAACGTGCCCACTCTCTGTTTTGGCC
TCGGCGGAGTTCTGCAACATCCTCTCTAGGGTCTGTCTCGGGCCCCGAGCCGCCCAAGCTCTATGTCTAC
ATCAATGAGCTCTGCACTGTTCTCAAGGCCCACTCAGCCAAAAAGAGCTGAACTTGGCCCCGCGCCACCAC
TCCAATGAGCCCTCTGGGAATAACCTCCACACACCTCTCCTTGGACCCCAAAATGCTGAAAAACATGCGCTCT
CAGTCTCCAAGGACCCGTGGTTCCCGCGGCAGATCCAGCGTTTGAGCAGCTGCTGGCGCTCTATGTGGCAGAG
ATCCGGCGGCTGCAGGAAAAGGAGTTGGATCTCTCAGAATTGGATGACCCAGACTCCGATACCTGCAGGAGGCA
CGGTTGAAGCGTAAGCTGATCCGCCTCTTTGGGCGACTATGTGAGCTGAAAGACTGCTCTTCACTGACCGGCCGT
GTCATAGAGCAGCGCATCCCCACCTGGCACCCGCTACCCAGAGTTAACAGGCGCATTGAGCGGCTCATCAAC
AAGCCAGGGCCTGATACCTTCCCTGACTATGGGGATGTGCTTCGGGCTGTAGAGAAGGCAGCTGCCCGACACAGC
CTTGGCTCCCCCGACAGCAGCTCCAGCTCATGGCTCAGGATGCCCTCCGAGATGTGGGCATCAGGTTACAGGAG
CGACGTCACTCGATCTCATCTACAACCTTTGGCTGCCACCTCACAGATGACTATAGGCCAGGCGTTGACCTTGCA
CTATCAGATCCTGTGTTGGCCCCGCCCTTCGGGAAAACCGGAGTTTGGCCATGAGTOGGCTGGATGAGGTCATC
TCCAAATACGCAATGTTGCAAGACAAAAGTGAGGAGGGCGAGAGAAAAAGAGAAGAGCTCGGCTCCAAGGCACC
TCTTCCCACTCTGCAGACACCCCGAAGCCTCCTTGGATTCTGGTGAGGGCCCTAGTGGAAATGGCATCCAGGGG
TGCCCTTCTGCTCCAGAGCTGAGACAGATGACGAAGACGATGAGGAGAGTGATGAGGAAGAGGAGGAGGAG
GAAGAAGAAGAGGAGGAGGCCACAGATTCTGAAGAGGAGGAGGATCTGGAACAGATGCAGGAGGGGTGAGGAGGAT
GATGAAGAGGAGGACGAAGAGGAAGAAGCAGCAGCAGGTAAGATGGAGACAAGAGCCCCATGTCCTCACTACAG
ATCTCCAATGAAAAGAACCTGGAACTTGGCAACAGATCAGCAGATCTTCAGGGGAGCAGCAAAACAAGGACGC
ATAGTGTCAACCATCGTTACTGTGAGAAGAACCCCTGGCCCCCTCCAGCATAGATGCTGAAAGCAATGGAGAACAG
CCTGAGGAGCTGACCCCTGGAGGAAGAAAGCCCTTGCTCTCAGCTCTTTGAGCTAGAGATTGAAGCTTTGCCCTG
GATACCCCTTCTCTGTGAGAGCGGACATTTCTCTTCCAGGAAGCAATCAGAGGAGCCCTTCAACACTGCTCTTA
GAGAATGGAGCAGGCATGGTCTCTTCTACTTCTTCAATGGAGGCGTCTCTCTCACAACTGGGAGATTCTGTT
CCCCCTGCAAAAAATCTCGGAAGGAGAAGAAGCAACAGGATCAGGGCCATTAGGAAAACAGTATGTGGAAAAG
CAAAAGTCAGTGATGAGAAGAATGGGAAAAGATATGTACCTGCCAGCCCACTTCCCCCTTGGCTCTCTTG
GCCCAAGTTGCTGATTCTCTCACAGGGGTGGACTCTCCAGCCATGGCCCTGGTGGTACTGCAAGACAAGTGTGCCACA
TCTCCAGCCCGCTGTCCCAACCCCAATTCAGAGCCTCTCGGCCTGGTACTGCAAGACAAGTGTGCCACA
CAATGCGATCCAGAAAGATCATCGTCTCTCAGACTCTGATTAACTGCCTCCCCCTTCTCCTGCTCCAGAAATG
TTCTGGGATACCAATTTGGAGGAAGGTGGGAAGCAGATGACTGAGGAAGGGATGGACTAAGCTAATCCCCCTTTGG
TGTGTTTCTTT

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FIGURE 1943

MATANSIIIVLDDDDDEAAAAQPGPSHPLFNAASP GAEAPSSSEP HGARGSSSSGKKCYKLENEKLFEEFLELCK
MQTADHPEVVPFLYNRQORAHSLFLASAEFCNILSRVLSRARSRP AKLYVYINELCTVLKAHSAKKKLNLPAAAT
TSNEPSGNNPPTHLSLDPTNAENTASQSPRTGRSRRQIORLEQLLALYVAEIRRLQEKELDLSELDDPD SAYLQE
ARLKRKLIRLFGRLCELKDCSSLTGRVIEQRIPIYRGTRYPEVNRRIERLINKPGPDTFPDYGDVLR AVEKAAARH
SLGLPRQQLQMAQDAFRDVGIRLQERRHLDLIYNFGCHLTDDYRPGVDPALSDPVLARRLRENRS LAMSRLDEV
ISKYAMLQDKSEEGERKKRRARLQGTSSHSADTPEASLD SGEGPSGMASQGCPSASRAETDDDEDESEDEEEEE
EEEEEEATDSEEEEDLEQM QEGQEDDEEEDEEEEAAGKDGDKSPMSSLQISNEKNLEPGKQISRSSGEQQNKG
RIVSPSLLSEEP LAPSSIDAESNGEQPEELTLEEE SPVSOLFELIEALPLDTPSSVETDISSSRKQSEEPFTTV
LENGAGMVSSTSFNGGVSPHNWGD SGPPCKKSRKEKKQTGSGPLGNSYVERQRSVHEKNGKKICTLPSPSPPLAS
LAPVADSSSTRVDSPSHGLVTSSLCIPSPARLSQTPHSQPPRPGTCKTSVATQCDPEEIIVLSDSD

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FIGURE 1944

GGCACGAGGGCTGAGAAGAGTTTGCACGTGGATCGCCGTTCCGGTGGGCGAGATGGAGACAGCCCCAAGCCGG
GCAAGGATGTCCC GCCCAAGAAAGACAACTTCAGACCAAGAGAAAGAAACCGCGCGGATACTGGGAGGAAGAGA
CCGTTCGCCACACAGCCGGAGCCTCTCCAGGGCCTCCTCGTAACAAGAAGATCGGGAGCTCCGTCCTCAGAGAC
CAAAAAATGCTTTACATCTTAAAGAACTCTCGGATCTCTAAGAAGCCTCAGGTCCCAGAAAGAACCCCGAATGGA
AGAACC CGGAGTCCCAGCGCGGCTTGTCCGGGGCCCCAAGATCCATCCAGGCCCCGCCCCCGTCCCTGTGGAAAG
TGGTCCAGAAGTTCTGTCGCATTGACAAATCCCGAAAGCTACCACATTCTAAGCCAAAACCTCGAAGCCGACTTG
AGGTGGCTGAAGCTGAGGAAGAGGAAACAAAGTATCAAAGCTGCTCGTTCTGAGCTGCTGCTTGTCTGAAGAACCTG
GGTTTCTGGAAGGGGAGGATGGGGAAGACACAGCAAAGATATGCCAGGCTGACATTGTGGAGGCTGTGGACATTG
CAAGTGCAGCCAAAGCACTTTGACTTGAATCTCGCGCAGTTTGGACCTACAGACTAACTACTCTCGAACTGGAA
GACACCTGGCTTTTGGAGGGCGCCGAGGT CATGTGGCTGCCCTTGATTGGGTAACAAAGAAGCTTATGTGGCAGA
TCAACGTCATGAGGCGGTGCGGGACATCCGGTTTCTCCATTCTGAGGCACTGCTTGTCTGTTCTCAGAACCCGT
GGCTCCACATCTATGACAAATCAGGGCATTGAGCTCCACTGTATCCGCCGCTGTGACCCGAGTAACACGGCTTGAT
TCCTGCCCTTCCACTTCTCCTGGCTACAGCTTCAGAAACAGGGTTTCTAACCTACCTGGATGTGTCACTGGGGA
AGATTGTGGCAGCTCTGAATGCTCGAGCTGGGCGGCTCGATGTTATGAGTCAGAAACCTTACAATGCCGTATCC
ATCTCGGACACAGCAATGGTACTGTGCTTTATGGAGTCCAGCTATGAAGGACCACTGGCAAGATTCTCTGTC
ATCGTGGTGGGGTCCGGGCTGTGGCAGTAGATTCTACAGGCAGTACATGGCCACCTCTGGCCTAGACCACAGC
TGAAGATCTTTGACTTGCAGGGACGTACCAGCCTCTGAGCACTCGGACCTGCCCATGGAGCAGGGCACCTGG
CCTTCTCCAGAGGGGACTGCTGTTGGCGGGAATGGGTGACGTTGTCAACATCTGGGCAGGGCAGGGCAAGGCCA
GCCACCCCTCCCTTGAACAGCCCTACCTCACCCACCGGCTCTCAGGCCCTGTGCATGGCCTTCACTTCTGCCCT
TTGAAGATGTGCTGGGGTGGGGCACACTGGGGGCATCACCAGCATGCTGTCCTGGGCGCGGTGAGCCCACT
TCGATGGCTGGAGAGTAATCCATACAGAAGCCGGAAGCAGCGCCAGGAGTGGGAGGTGAAGGCCCTGCTAGAGA
AGGTACTGCAGAGCTTATTTGTCTGGACCCACGAGCCCTGGCCGAGGTGGATGTATCTCCCTGGAGCAGGGAA
AGAAGGAGCAGATAGAGAGGCTGGGCTATGACCCGAGGCTAAGGCTCCCTCCAGCCAAAGCCAAAGCAGAAGG
GCCGACCTTCCACGGCAAGCTTGGTGAAGAGGAAGAGGAAGGTCATGGATGAGGAACAGAGGCAAGGTCCGGC
AGAGCCTTTCAGCAGCAGCATCAAGGAGGCGAAGGCCAAGCCACGGGGGCCGGCCATCTGCCCTGGACAGAT
TTGTGCGCTGAGCCAGACTCCAGGGTTCCTGGGAACAGTCTCTCCCAAGATCACTGTAGGGAAATGAGTGT
CCCTGGAAACAAGAGGTGGGGCAGTGTGCCCTTCCCAACTGGGGGTGGACAGCTGTCTCTGGGGTGGGT
GGTATTAAAGAGGAAGCGATTTTTGGAAAAA

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FIGURE 1945

METAPKPGKDVPFKKDKLQTKRKKPRRYWEEETVPTTAGASPGPPRNKKNRELRPQRPKNAYILKKSRIKPKPV
PKKPREWKNPESQRLSGAQDPFPGPAPVPVEVVQKFCRIDKSRKLPKSHKAKTRSRLEVAEAEETSIKAARSE
LLLAEEPFGLEGEDGEDTAKICQADIVEAVD IASAÀKHFDLNLKQFGPYRLNYSRTGRHLAFGGRRGHVAALDWV
TKKLMCEINVMEAVRDIRFLHSEALLAVAQNRWLHIYDNQGIELHCIRRCDRVTRLEFLPFHFLLATASETGFLT
YLDVSVGKIVAALNARAGRLDVMSQNPYNAVILHGSNGTVSLWSPAMKEPLAKILCHRGGVRAVAVDSTGTMYA
TSGLDHLKIFDLRGTYQPLSTRTLPHGAGHLAFSQRGLLVAGMGDVVNIWAGQGKASPPSLEQPYLTHRLSGFV
HGLQFCPFEDVLGVGHTGGITSM LVP GAGEPNFDGLESNPYRSRKQRQEW EVKALLEKVP AELICLDPRALAEVD
VISLEQGGKKEQIERLGYDPQAKAPFQPKPKQKGRSSTASLVKRRKRVMD EHRDKVRQSLQQHHKEAKAKPTGA
RPSALDRFVR

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FIGURE 1946

CTCTCTTCCACAGGAGGCCTACACGCCGCCGCTTGTGCTGCAGCCATGTCTCTAGTGATCCCTGAAAAGTTCCAG
CATATTTTGGAGTACTCAACACCAACATCGATGGGCGGCGGAAAAATAGCCTTTGCCATCACTGCCATTAAGGGT
GTGGGCCGAAGATATGCTCATGTGGTGTTGAGGAAAGCAGACATTGACCTACCAAGAGGGCGGGAGAACTCACT
GAGGATGAGGTGGAACGTGTGATCACCATTATGCAGAATCCAGCCAGTACAAGATCCAGACTGGTTCTTGAAC
AGACAGAAGGATGTAAGGATGGAAAAATACAGCCAGGTCTAGCCAATGGTCTGGACAACAAGCTCCGTGAAGAC
CTGGAGCGACTGAAGAAGATTCGGGCCCATAGAGGGCTGCGTCACTTCTGGGGCCCTTCGTGTCGAGGCCAGCAC
ACCAAGACCCTGGCCGCCGTGGCCGACCGTGGGTGTGTCCAGAAGAAATTAAGTCTGTAGGCCCTTGTCTGTTA
ATAAATAGTTTATATACAAAAAA

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FIGURE 1947

MSLVIPEKFQHILRVLNINIDGRRKIAFAITAIGVGRRYAHVVLRKADIDLTKRAGELTEDEVERVITIMQNPR
QYKIPDWFLNRQKDVKGKYSQVLANGLDNKLREDLERLKKIRAHRLRHFHWGLRVRGQHTKITGRRGRITGVSK
KK

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FIGURE 1948

GGAGAGGATCCCAGGAGCCGGTGAGAATTCTCTGTTTTTCTCTACCATCCTTTCCAGGCCCTTTCTCACCTAAT
GAGTCGTAGACGAGGGCCAGAGAGTCTGTAAGTGGCTGGTGAAAGATTAGTGTCCAGGGCCCTACATCCG
GGAGGTGGTTCGGGATAAAGAGAACTAGTCTTGGGAACAATGTAGGTGGGAACCTTAAGGGAATGGGAGAGCGGCC
CATAGAGGTGACGCGAGGGCGCGATTGGAGTAAAGCGGACCTGTGTAGGTATAGAGTTGAGTCAAGTGGAGTCA
CTGCCCTCTGCCCCTCTGGTCAGCGTGATGGCCAGAGGCCCTGGGGGCCCCCACTGGGTGGCCGTGGGACTGCTGA
CCTGGGCGACCTTGGGGCTTCTGGTGGCTGGACTCGGGGCTCATGACGACCTGCACGACGATCTGCAAGAGGACT
TCCATGCCACAGCCACAGGCATCAGATGAAGATTCCAACATGGCCACAGCCATGCCATGGCCATGGCCACA
CTCAGAGAGCATCTGGCATGGACATACCCACGATCAGAACCATGGACATTCACATGAGGATTACACCATGGCC
ATAGCCATGGCTACTCCCATGAGAGCCTCTACCACAGAGGACATGGACATGACCATGAGCATAGCCATGGAGGCT
ATGGGGAGCTGGGGCTCCAGGCATCAAGCAGGACCTGGATGCTGTCACTCTCTGGGCTTATGCACTGGGGGCCA
CAGTGCTGATCTCAGCAGCTCCATTTTTTGTCCTCTTCCTTATCCCGTGGAGTCGAACCTCTCCCGGCATCGCT
CTCTACTTCAGATCTTGCTCAGTTTTGCTTCCGGTGGGCTCCTGGAGATGCTTTCCTGCACCTCATTCCTCATG
CTCTTGAACCTCATTTCTACCACACTCTGGAGCAACCCGGACATGGACACTCCCACAGTGGCCAGGGCCCATTC
TGTCGTGGGACTGTGGGTTCCTCAGTGGAAATTGTTGCCTTCTTGTCGTGGAGAAATTTGTGAGACATGTGAAAG
GAGGACATGGTCACAGTCATGGACATGGACACGCTCACAGTCATACACCTGGGAAGTCATGGACATGGAAGACAAG
AGCGTTCTACCAAGGAGAAGCAGAGCTCAGAGGAAGAAGAAAGGAAACAAGAGGGGTTCAAGAGAGGCCGAGGAG
GGAGCAGTACACCAAAGATGGGCCAGTGAGACCTCAGAAGCTGAAGAAGCTGAAGAAGAAAAGAGGCTTAGACCTGCGTGT
TGTCGGGGTACCTGAATCTGGCTGCTGACTTGGCACACAACCTTCACTGATGGTCTGGCCATTGGGGCTTCCTTTC
GAGGGGCGCGGGGACTAGGGATCCTGACCACAATGACTGTCTGCTACATGAAGTGCCCCACGAGGTCGGAGACT
TTGCCATCTTGGTCCAGTCTGGCTGCAGCAAAGCAGGCGATGCGTCTGCAACTACTGACAGCAGTAGGGGACAT
TGGCAGGCACAGCCTTGCCCTTCTCACTGAAGGAGGACAGTGGGCAGTGAATTCAGGTGGTGCAGGTCCTG
GCTGGGTCTGCCATTTACTGCAGGTGGCTTTATCTACGTAGCAACAGTGTCTGTGTGGCCGAGCTGCTGAGGG
AGGCATACCATTTGAATCACTTCTGGAGGTGCTGGGGCTGCTGGGGGAGTTATCATGATGGTGTGATTGCC
ACCTTGAGTGAGGGGTGGATAAACTACCCCTGCCCAACCTCTACCCCTAACTCCAGGTCAAGGGTCCGTAGAG
GTTGGGGGCCCTGGCCAGGACATCTGCCAAAGGAAGGAACGTAGACCTGGGAGAATGGTTACTTTGGCATTAGG
GCCTTCAAGGGCTGGCAGTCTTACAGAGGCTGGAGCGGTGAGAATGAGAGGCCAGAGGGACCATAGTGTGGGCA
CTGCTGACCATTTGTCATTTGGAAGGCTAAATGGGGCATGAAGAAGGCTGGAAGGGACAGGGGTGATGGCAG
CCTACCTGGTGTCCCTACCCCACTGTCTCGGAGAACAAGTTGCTACACAGGAAGTTCTCCAAGTCCAGTT
TCCTTTCTCCCAAGGTTGGTGGAGGCTTCAGGGGAAGACCAGAGTCTGGACAGAGAGGGTAACAGGAGGAGTCG
GGGATAAACATCAAACATCAATCGTGTGCTGATTGGGAGTGATTGGGGGATGGGGTGGAGAGGGTTAGTT
GGTATTCTCATGGCCTGATTTTTTTGTTTCTATTCTCTTTATATCACTGTGTTGAATCGAGGGGAGGGGTGG
TAACCGGAATAAAGACCTCCGATCTTCGCCCC

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FIGURE 1949

GCTCACAGTCATCAATTATAGACCCCAACAATGCGCCCTGAAGACAGAATGTTCCATATCAGAGCTGTGATCTT
GAGAGCCCTCTCCTTGGCTTTCCTGCTGAGTCTCCGAGGAGCTGGGCCATCAAGGCGGACCATGTGTCAACTTA
TGCCGCGTTTGTACAGACGCATAGACCAACAGGGGAGTTTATGTTTGAATTTGATGAAGATGAGATGTTCTATGT
GGATCTGGACAAGAAGGAGACCGTCTGGCATCTGGAGGAGTTTGCCAAAGCCTTTTCCTTTGAGGCTCAGGGCGG
GCTGGCTAACATTGCTATATTGAACAACAACTTGAATACCTTGATCCAGCGTTCCAACCACACTCAGGCCACCA
CGATCCCCCTGAGGTGACCGTGTTCCTCAAGGAGCCTGTGGAGCTGGGCCAGCCCAACACCCCTCATCTGCCACAT
TGACAAGTTCTTCCCAACCGTGTCTCAACGTCAAGTGGCTGTGCAACGGGGAGCTGTCACCTGAGGGTGTGCTGA
GAGCCTCTTCTGCCCCAGAACAGATTACAGCTTCCACAAGTTCATTACCTGACCTTTGTGCCCTCAGCAGAGGA
CTTCTATGACTGCAGGGTGGAGCACTGGGGCTTGACCAGCCGCTCCTCAAGCACTGGGAGGCCCAAGAGCCAA
CCAGATGCGTGAGACAACGAGACTGTGCTCTGTGCCCTGGGCCCTGGTGTGGGCCCTAGTCGGCATCATCGTGGG
CACCGTCTCATCAAAAGTCTCTGCGTTCTGGCCATGACCCCCGGGCCAGGGGACCCCTGTAATACTGTAAA
GGTGACAAAATATCTGAACAGAAAGAGGACTTAGGAGAGATCTGAATCCAGCTGCCCTACAACTCCATCTCAGC
TTTTCTTCTCACTTCATGTGAAAATACTCCAGTGGCTGACTGAATGCTGACCCCTCAAGCTCTGTCTTATCC
ATTACCTCAAAGCAGTCATTCTTAGTAAAGTTTCCAACAATAAGAAATTAATGACACTTTGGTAGCACTAATAT
GGAGATTATCCTTTTATTGAGCCTTTTATCCTCTGTTCTCCTTTGAAGAACCCCTCACTGTACCTTCCCAGAA
TACCCTAAGACCAATAATACTTCAGTATTTC

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FIGURE 1950

MRPEDRMFHIRAVILRALSLAFLLSLRGAGAIKADHVSTYAAFVQTHRPTGEFMFEFDEDEMFYVDLKKETVWH
LEEFQAFSFEAQGGLANIAIILNNLNTLIQRSNHTQATNDPPEVTVFPKEPVELGQPNTLICHIDKFFPPVLNV
TWLCNGELVTEGVAESLFLPRTDYSFHKFHYLTFVPSAEDFYDCRVEHWGLDQPLLKHWEAQEPIQMPETTETVL
CALGLVLGLVGIIIVGTVLIIKSLRSGHDPRAQGTI

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FIGURE 1951A

GGACTGCGGGATAGGAAGCTGGGGATATGGACAAGCAGCAGCGTTATAGCGCTCTGGGTTTCGGGACATAGGCCCT
GGGCCATGCGGGCCCCCTTGGCCCCCTTGGCGGACCCCGAGGAACGTTTCGGAAAGCTGGTCCCTGTGGCTGGGGGA
AAGCGGGGGGTGGGGGGGAAGCGGGCAGCTGACCCGGTCAGCCAATCTGGGTGCTGCTGACGTGAGCGGCGGG
CCCCGATGCTCTCCCCACCCCCCAGCCCGTTTCGGGAAGGGAGGGCTGGGGGTACGCCCCATCCCCAGCACG
GCTTCGTTTTCTGGGGGGGGGTGACACCCCGGATTACATACCCCGTACCAAGCCGAGGGCAACTTTGGAGGCC
CCTGGAAGGCTTTAGGATCGAGATTCTTCGCTGCTGCTGCTGCTTACCGCGGAGAACCCACCCGCGAGGCTCT
CGGCGCACACCCCTGGCGGGTTACGGCAGGCTACGCCCCACGCGACCCCTCCCGTTTCCCTGCTTTGGCCAATGGA
GGAGCTACGAATGGCAGCAGCTGCTCGAGCTTGGCAGTCTCCAGTTGGGCTGTGCATGGAAGCTTGGGAAGACTT
TGTTGGAAAGGGAGCGCGGGAGAGAGTGTGGAGGCTCTGGGCGATGGCTTCCGACCTCTTCCAACCCCTC
TTTCCTTGGAGTCTGGCGGACCAAGCTCAGCCAATTTGGCTTGGAGATGTGGCGGGTGGCACTTCCCTGTGGGT
TCTGCGGCACCTCTTCGCTGTGGTACTGACACCTTGGAAATGAAGTTTATGACCTCATCGTTGCGGCTGGCCAA
AGAAAAAGCTCCCGCGGAGAGGTGTTCCTTCCCTTTCGACTCAGCTTCTTACC CGCGTGTAGCGAGCGCGCGCG
CGGAGGGGGTGGGGAAAAATCTCAAGCAGGCTGGCGCGCATGAGCGGCGAAGCTCTCTCCCGCTATATATA
AAGGCTGGCGCGGGCTCTGGCGGGCCATTTCGTGCTGGAGTGGAGCAGCTCTTGAACAGAGCTGGAGGATTCT
GCC TACCGATACAGAGCTTCGAGTCTGGTGGCGGCCCATTAACAATCCACCTCCATCCGCTTGGAAATGGCCT
CGTCCCGGCTCATGACTGGTTCGGCAGCGGACAGTACAGACCCCTAGAAGCCCTTGAGCTGCTCCCTTTTCGGGCG
CGGCCCAATCTCGGAGTCTGTCCACCCCTCTACTCCGCTTCAAGAGGATTTCAGAGATGGAGGCGGGCGGCTC
CTTAAACCACTTTTCGTGTTTCATCGGCTTCCATCCGAGATCGAAGCGGAGCTCGTGGGCCCCGTAGGGGCCGA
CAAGAAAGAGGAATCCCTGAGACCAACAGCGGGCTATATTGACAGCGGTGTCTGAGATCGGGGACCGTCTTTTG
AAGAGTCAGTCCCTCCTTAGTGGCCGCTCAGCTGAGGCGCGGCCATTTCCTGCTGTGCGCGCTGTGACAG
CGCGCCAAGCTGCCCGGAGCTCTCCGAGAGGGCCCCAAGAGACTGCTTTCTGTGCTGGCCAGCGAGGGGTTTCT
GCCTGGAGGCCAAGAGGAACGCTCTCCCCCAACTTAGCGGGTTATGCTGGAGCGGCGGTGAGGGGAACCGAG
GCCACCCGGAATTTCCGCGGCTGAGGGCAGCGCGGTTCTTGGCGTCAAGATGCTGCAAAACGTGACTCCCCAC
ATAAGCTCTCTGGGGAAGGGAATGCAAGGTTGCTGGGCTGGGCCCAGAAGCAGACCCAGGGAAGGATT
CGAAAAACCTCTCTCTTGTATAGAGGGCTTTGAGAGCCCCACAATGGCTTCGGTGCCTGCTTTGCAACTTACCCCT
GCCAACCACCCACCCCGAGGTTGCTCAATCCAAAAAGCCAGGACGAGTTACCAACACGCTGCAATACCTACAC
AAGGTAGTGATGAAGGCTCTGTGGAACATCAGTTTCGATGGCCATTTCGGCAGCCTTGGGATGCTGTCAAATG
GGCTATCCGGATTATCACAATAATATAAACAGCCTATGGACATGGGTACTATTAGAGGAGACTTGAANAACAT
TATTATTGGGCTGCTTCAGAGTGATGCAAGATTTAATACCATGTTACACTTATAACAAAGGCC
ACTGATGATATTGCTCTAATGGCACAAACGCTGGAAGAATATTCCTACAGAAAGTTGATCAATTGCCACGAAGA
GAACAGAGCTGGTAGTGACCTTCCCTAAGAACAGCCACAAGAGGGGGCCAAGTTGGCAGCGCTCCAGGCGAGT
GTACCAAGTGGCCATCAGGTGGCTGCGCTCTCTCTGTGTGTCACAGCAGCCTGTATACCTCTCCACCTGAGATA
CCTACCACTGCTCTCAACATTCGCCACCCATCAGTCATTCTCTCCACTTCTCAAGTCTTGCACCTCTGCTGGA
CCCCGCTCTGTGTTACTGAGCTCTCTCCAGCCAGCCCTTGCAGGGAAGAGCGCTAAAGGCGGAAGCA
GATACTACCAACCCCTACACCTACAGCCATCTTGGCTCTGTGTTCTCAGCTAGCCCTCTGGGAGTCTTGAAGCT
AAGGCAGCAGCGCTTCCCCCTATGGCTAGAGAGAGTGGTGCGCCCATCAAGCGCCACCGCAAGACTTGGCTGAC
TCTCAGCAACCAACACCGAGAGCTTAAGAAAGGAAGACTTCAACACAGTTAACAATGGCAATGGCAATTTGAG
GAGTTACTCTTAAGAAGCATGCTGCTTATGCTTGGCTTCTATAAACAGTGGATGCTCTGCACTTGGGCTG
CATGACTACCATGACATTAAGCACCCCATGGACCTCAGCACTGTCAAGCGGAAGATGGGAACCGTGATTAC
CGGGATGCACAGGAGTTTGTGCTGATGTACGGCTTATGTTCTCCAAGTCTATAAGTACAATCCCCAGATCAC
GATGTTGTGGCAATGGCAGGAAGCTACAGGATGTTATTGAGTTTCGTTATGCAAGATGCCAGATGAACCACTA
GAACCAAGGCTTTTACCACTCTCTACTGCCATGGCCCCCTGGCTTGGCCAAATCGCTTTCAGAGTCTCCAGTGAG
GAAAGTAGCAGTGAGAGCTTCTCTGAGGAAGAGGAGGGAAGATGAGGAGGACGAGGAGGAAGAGAGAGTGAA
AGCTCAGACTCAGAGGAAGAAGGGCTCATCGCTTAGCAGAACTACAGGAACAGCTTCGGGCACTATCAAGCAAA
CTGGCTGCTTGTCCCGAGGCTCAATATCCAAGCCCAAGGGAAGAAAGAGAAAAAGAGAAAAAGAAACGG
AAGCGAGAGAAGCATCAGGCGCAGAGCTGGGGCCGATGAAGATGACAAGGGGCTTAGGGCAACCCCGCACTCA
CCTAAGAAAGTCAAGAAAGCAAGTGGCAGTGGGGGTGGCAGTGTGCTTATGGGCCCTTCGGCTTTCGACCTTCT
GGAGGAAGTGGCACCAGCTCCCCAAAAAGGCCACAAAGACAGCCCCACCTGCCTGCTACAGGTTATGATTCA

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FIGURE 1951B

GAGGAGGAGGAAGAGAGCAGGCCCATGAGTTACGATGAGAAGCGGCAGCTGAGCCTGGACATCAACAAATTACCT
GGGGAGAAGCTGGGCCGAGTTGTGCATATAATCCAAGCCAGGGAGCCCTCTTTACGTGATTCAAACCCAGAAGAG
ATTGAGATTGATTTTGAAACACTCAAGCCATCCACACTTAGAGAGCTTGAGCGCTATGTCCTTTCTGCCTACGT
AAGAAACCCCGAAGCCCTACACCATTAAAGAAGCCTGTGGGAAAGACAAAGGAGGAACCTGGCTTTGGAGAAAAAG
CGGGAATTAGAAAAGCGGTTACAAGATGTCAGCGGACAGCTCAATTCTACTAAAAAGCCCCAAGAAAGCGAAT
GAGAAAAAGAGTCATCCTCTGCACAGCAAGTAGCAGTGTACGCCCTTAGCGCTTCCAGCTCCAGCTCAGATTCC
AGCTCCTCCTCTTCCTCGTCTGTCCTTCAGACACCAAGTATTGAGACTCAGGCTAAGGGGTCAGGCCAGATGGG
GCAGGAAGGCTCCGCAGGACCGGACCCCTAGACCACCCTGCCCCACCTGCCCTTCCCCTTTGCTGTGACACTT
CTTCATCTCACCCCCCTGCCCCCTCTAGGAGAGCTGGCTCTGCAGTGGGGGAGGGATGCAGGGACATTACT
GAAGGAGGGACATGGACAAAACAACATTGAATCCAGCCCCATTGGGGAGTGATCTCTTGGACACAGAGCCCC
ATTCAAAATGGGGCAGGGCAAGGGTGGGAGTGTGCAAAGCCCTGATCTGGAGTTACCTGAGGCCATAGCTGCCCT
ATTCACCTCTAAGGGCCCTGTTTTGAGATTGTTGTTCTAATTTATTTTAAGCTAGGTAAGGCTGGGGGAGGGT
GGGGCCGTGGTCCCCCTCAGCCTCCATGGGGAGGAAGAAGGGGAGCTCTTTTTTACGTTGATTTTTTTTTTTC
TACTCTGTTTTCCCTTTTTCTCCGCTCCATTGGGGCCCTGGGGGTTTCAGTCACTCTCCCATTGTTGCCCT
GGACTGTCTTTGTTGATTCTAACTTGTAATAAAGAAAATAT

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FIGURE 1952

GGGCAGAAAGGGC~~AC~~GCCTTGTGGGTGACTACAGGTTAGGAGACCGTTGAACCTGGAGGGGCCCTAGGATGGAC
CCCGTGGAAAGATTAGAGACTGCGCCCTCTCCCTGGCGCCGCCCTCCCCTACACGCGCGGGTATATTCTGTIG
CAGTTGGCCAGGACCTGTTTCCAAGACTGCCCCCTCGCACTTCCGTCCCTCTGGTTTTGTAAAGTGA~~TC~~CT
CATAGGAACCCCCACCCCGGTGACACTACTCCAGCTCCTGGCTGACTTCTAGTCTTCTGGITGAAGCTGCGCC
TTTAGATGACACGACCTACCCACCCCTGTTTCCAGGGATGCCGGGCCCTGGAGCCCACAGAATTCTTCCAGTC
CCTGGGTGGGGACGGAGAAAGGAACGTTGAGATTGAGATGGCCCATGGCACCCACGCTCGCCTTCAAGTTCCA
GCATGGAGTGATTGAGCAGTGGATTCTCGGGCCTCAGCTGGGTCTTACATTAGTGCCTTACGGGTGAACAAGGT
GATTGAGATTAACCCCTTACCTGCTTGGCACCATGTCTGGCTGTGCAGCAGACTGTCAGTACTGGGAGCGCCTGCT
GGCCAAAGGAATGCAGGCTGTACTATCTGCGAAATGGAGAACGTATTTCACTGTGCGCAGCCTCCAAGCTGCTGTC
CAACATGATGTGCCAGTACCGGGGCATGGGCCTCTCTATGGGCAGTATGATCTGTGGCTGGGATAAGAAGGGTCC
TGGACTCTACTACGTGGATGAACATGGGACTCGGCTCTCAGGAAATATGTTCTCCACGGGTAGTGGGAACACTTA
TGCTACGGGTGTCATGGACAGTGGCTATCGGCCTAATCTTAGCCCTGAAGAGCCCTATGACCTTGGCCGAGGGC
TATTGCTTATGCCACTACAGAGACAGCTATTCTGGAGGCGTGTCAATATGTACCACATGAAGGAAGATGGTTG
GGTGAAAGTAGAAAGTACAGATGTGAGTGACCTGCTGCACCACTACCGGGAAGCCAATCA~~ATA~~ATGGTGGTGGTG
GCAGCTGGGCAGGTCTCCTCTGGGAGGTCTTGGCCGACTCAGGGACCTAAGCCACGTTAAGTCCAAGGAGAAGAA
GAGGCCTAGCCTGAGCCAAAGAGAGAGTACGGGCTCAGCAGCCAGGAGGCGGTGAAGTGATCTTCTGCGTG
TTCTC

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FIGURE 1953

MLIGTPTPRDTTPSSWLITSSLLVEAAPLDDTTLPVSSGCPGLEPTEFFQSLGGDGERNVQIEMAHGTTTLAFK
FQHGVIAAVDSRASAGSYISALRVNKVIEINPYLLGTMSCAADCQYWERLLAKECRLYYLRNGERISVSAASKL
LSNMMCQYRGMGLSMGSMICGWDKKGPLYVDEHGTRLSGNMFSTGSGNTYAYGVMDSGYRPNLSPEEAYDLGR
RAIAYATHRDSYSGGVVNMYHMKEDGWNKVESTDVSDLLHQYREANQ

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FIGURE 1954

ATTCTTGTCTGTTCTGCCTCACTCCCGAGCTCTACTGACTCCCAACAGAGCGCCCAAGAAGAAAATGGCCATAAG
TGGAGTCCCTGTGCTAGGATTTTTTCATCATAGCTGTGCTGATGAGCGCTCAGGAATCATGGGCTATCAAAGAAGA
ACATGTGATCATCCAGGCCGAGTCTATCTGAATCCTGACCAATCAGGCGAGTTTATGTTTGACTTTGATGGTGA
TGAGATTTTCCATGTGGATATGGCAAAGAAGGAGACGGTCTGGCGGCTTGAAGAATTGGACGATTTGCCAGCTT
TGAGGCTCAAGGTGCATTGGCCAACATAGCTGTGGCAAAGCCAACTGGAAATCATGACAAGCGCTCCAACATA
TACTCCGATCACCAATGTACCTCCAGAGGTAACGTGTGCTACGAAACAGCCCTGTGGAACTGAGAGAGCCCAACGT
CCTCATCTGTTTCATAGACAAGTTACCCCAACAGTGGTCAATGTCACGTGGCTTCGAAATGGAAAACCTGTAC
CACAGGAGTGTGAGAGACAGTCTTCTGCCCCAGGGAAGACCACCTTTTCCGCAAGTTCCACTATCTCCCCTTCT
GCCCTCAACTGAGGACGTTTACGACTGCAGGGTGGAGCACTGGGGCTTGGATGAGCCTCTTCTCAAGCACTGGGA
GTTTGATGCTCCAAGCCCTCTCCAGAGACTACAGAGAACGTGGTGTGTGCCCTGGGCGTACTGTGGGTCTGGT
GGGCATCATTATTGGGACCATCTTCATCATCAAGGGATTGCGCAAAAGCAATGCAGCAGAACGAGGGGGCCTCT
GTAAGGCACATGGAGGTGATGGTGTTCCTAGAGAGAAGATCACTGAAGAACTTCTGCTTTAATGGCTTTACAA
AGCTGGCAATATTACAATCCTTGACCTCAGTGAAGCAGTCATCTTCAGCATTTCAGCCCTATAGCCACCCCA
AGAGTGGTTATGCCCTCCTCGATTGCTCCATACTCTAACATCTAGCTGGCTTCCCTGTCTATTGCCTTTTCTGTGTA
TCTATTTTCTCTCTATTCTCTATCATTTTATTATCACCATGCAATGCCCTCGGAATAAAACATACAGGAGTCTGTC
TCTGCTATGGAATGCCCATGGGCATCTCTTGTTACTTATTGTTTAAGGTTTCTCAAACCTGTGATTTTCTG
AACACAATAAACTATTTTGAAGATCTTGGGTGGAA

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FIGURE 1955

GCCGTCCTTATCTAAGTCAGAGTCTCCTAAAGAGCCAGAACAACCTGAGGAAGCTCTTCATTGGAGGGTTGAGCTTT
GAAACAACCTGATGAGAGCCTGAGGAGCCATTTTGAGCAGTGAGGGACACTCCCGGACAGTGTGGTCATGAGAGAT
CCAAACCCAAAGCGCTCCAGGGGCTTTGGATTTTTCACATATGCCACTGTGGAGGAGGTGGATGCAGCCGTGAATG
CAAGGCCACACAAGGTGGATGGAAGAGCTGTGGAACCAAGAGAGCTGTCTCAAGAGAAGATTCTCAAAATCCAG
GTGCCCACTTAACCTGTGAAAAAGATATATGCTGGTGGCATTAAAGAAACACTGAAGAAATCACCTAAGAAATTA
TTTTGAGTAGTATGGA AAAATTGAAGTGATTGAAAACATGACTGACCGAGGCAGTTGCAAGAAAAGGGGCTTTGC
CTTTGTAACTTTGATGACCATGACTCCGTGGATAAGACTGTCAATTCAGAAAATACCACAGTGTGAATGGCCACAA
CTGTGAAGTTAGGAAAGCCTGTCAAAAGCAAGAGATGGCTAGTGCTCCATCCAGCCGAAGAGGTCGAAGTGGTTCT
GGAAACTTTGGTGGTGGTCATGGAGGTGGTTTCGGTGGGAATGACAACCTTTGATCATGGAGGAAACTTCAGTGGT
TGTGGTAGCTTTGGTGGCAGCTGTGGTGGTGGTGATATGGTGGCAGTGAGGATGGCTATAATGGATTTGGTAAT
GATGGGAGCAATTTTGGAGGTGGTGGAAAGCTACAATGATTTTGGCAATTACAACAATCAGTCTTCAAATTTTGA
CCCATGAAGGGAGGAAACTTTGGAGGCAGAAGCTGTGGCCTCTATGGTGGTGGAGGCCAATACTTTGCCAAACCA
TGAAACCAAAGTGGCTATTGTGGTTCCAGTAGCAGCAGTAGCTATGGCAGTGGCAGAAGATTTTAATTAGGAAAC
AAAGCTTAGCAGGAGAGGAGAGCCAGAGAAGTGACAGGGAAGCTACAGGTTACAACAGATTTGTGAACCTCAGCCA
AGCACAGTGGTGGCAGGGCCTAGCTGGTACAAGAAAGACATGTTTTAGACAAATCTCATGTGTATGGGCAAAAA
ACTCGAGGACTGTATTTGTGACTAATTGTATAACAGGTTATTTAGTTTCTGTCTGTGGAAGGTGTAAGCAT
CCAACAAGGGTTTTAATGTAGATTTTTTTTTGCACCCATGCTGTTTTATTGCTAAATGTAATAGTCTGATCGTGA
CACTGAAAAAA

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ATGGACGAACGGCTACTGTGGGCGCCCCCTCAGGCGGGGGCCGGGGGGGCTTGGGATTGGTGAAGTGGGAGGCTT
GGGGGCCCTCGGAGCCTCCGGTGGGCGAATGCCCGTGGGGTAGCGGGGGGCTCCGGGAGCGCGAGGGAAG
CAGACGACTGGGACGATCTTCAGACAGATTAACGACATCAGACACGAGGCTGCAGAGGGCCGAGGACGAA
AGCCATTAAGTCCAGCGCAATGAAGCTGCTCTCTTTAGCGCTCTGTGTGAATCAAGGAGAAACATGGCCCT
CAGCATTCCGAGTCCAGAGGAGGAGCGGTGGACCAACAGCTGTACGCTTGGACAAATGCTTCTGGCAGAG
GGTGTGGCTGGGCCGAGAAAGGGGGCGCTCAGCAGCAGCAGCTGCAGCCGCTGCAGCCTTCTGGTGTGTGTGT
TCCCTTCGCAACTCCATCGAACACTCGCATCTCGCAGCAAACTTGCACAGATCCGTCACATATCACTCCGGA
CTGGAGAAGTAGTACGAGCGACTGTAATGAGTTCAGACCACTGTGATCAACTGCTAGGAGGACGAGCGCCACC
AGGCCGCTGGCCCCAAGAGAGTGAACGCATGTGAGCATATCATCACTGAAAGTTCAGCGCATCCAGATGCAG
CTGAAGCAGAGCAGCTTCGAGGCTGTGATGATCTCGCGCTCCGGTCTTCTGTAGTCGACAGCAAGGCGCGTGA
TTGCAACAAACAGGCCATGAGTCTTAATGAGTATTCTACTCCCACCTGAGTAACCCATCTCTAGTGTAGGAG
GCCAAGGAGGAGCTTGCACAAAGTGTGGCATCAGCGTGTCTCAGGTTCTCCAATGTGGTGGTTCACAAAGAGGAT
CGCTATAAGAAACAACTCGGAAGATTCCAAGAGGAGGCAAACTCATATGCTGCAAGACCGCGTGTGAGTACCC
GAGGGGGGCGACAGCGCACCAGCTCCCCACACCCCTCTCTCTGACAGTCTGGCGGCTCTTCAACTTCTCA
GGATCTGGAGACATGTTCTCGGGATGCGTGCGTCAACGAGATTCCTATCTGCTTCCGAGTGGAAATCACTC
CGACATCGATGGGGCCAGGGGGCTATGGGATAAECTCGGGGAGGCCAGATGTACAGGCCACGGGAAATGAGG
GCAAATGGCAGCTGGCAAGAGGCTGTACCCCCCTTCTCAGTGACATCCCAACGGAGGGACCGGAGGTTCAC
TGTGATACCTCCAATGATCTTGCCCTCAGGGTCACAGGGTGGGGGCTTCAACAGGCCGACTGAAAGAGGACG
CAGGCTTCCAGAGACAAACCCCAATACAGGAGAAGCAGAGACAGGAGAGGGCAATGGGGTCTATCCCTCTCT
AACAGCACTCTCTGTGCTGGGGTGCTAAATGATCAAGCAGGAAGAAATGGGGCTCTAAGGGAGTGTGGGGTGT
TCTCTCCTCTTTTTCATCTTTTCTCTCTGCTTCTTCTTCTTACAGAAACATACACATCCGAGAAACCTTA
TTTCTCAGAACCCCTTTTCTCTCTGTCTTCTCTCTCTCTCTCCACACTTCACACACATCTCCCCTTGC
AACTATCTGTGTTCTCTCTGGGCTCCCCACTTTCCCTTCCCAACCCACTGTATGCTCTGGAATCTGTGGAG
ACGCCACCCCTGCCAATACAGATGTGCGAAATGGGACATGACTCTTGGACAGGAGCAATGGGCCACGCCCC
ATGCATCCCCACCCGCCCTCCGGACGGTAACTACCTCATACGACGCTCATCTTAACCAATAAGAAATCGCT
CGGTGGACGAGAGTGTGACTCAGATATCTACCTCGGAGGAGTTCGTGACTTATAGGGAATTTAGGCTGGG
CTTGTGGGTTGAATCTTTTGTGTTTGTAAAGAAAGAAACCTCGGGATCCATCTGTTTTTGTGTGTTGT
TGTGTTTGTGTTGTGTGTTGTTGTGGTGGTGGTGGTGGTCTTAATTTTAAATTAGTTTGGGAAGTAGCTGT
TTTTTTTAAAACTACTATTTGAAATGGAGGGGGAAGAAATGGGAAGGGAGGTTATGCCAAATATGTTAAATATG
CAAAGGGGTCTGTAATAGAAAGAAAGGGGACAAACGAATGTAAGAGAGCCCCCTGGCTCAGGCCCTGTCCAT
CAGGAAGTAAATTTACAGGGCACCAGCTTTGCCCCCTGAACCAATCCCTTAGTGTTCTTTGTTCTATGCAGGCAGC
TTTCTGCCGCAATTTGATGTGGAGGACGTGAAGGGCTTGCACGTGGCCCTCTGATCTCCCCCTCTCCCAACCT
TGGCGACGCTGCAGCTAGTAATTTAGGAATAATGAAGATGCCATTTCCCTGTGGATGACATGCTCTTAAT
TTTTTAAAAACTACTATTTGAAATGGAGGGGGAAGAAATGGGAAGGGAGGTTATGCCAAATATGTTAAATATG
GTGTGGGTGCTGTATATGATCTCTCCCTAAATTCGCCAATAATGAGGTACTTTTGTGTACACCAAAATCAAG
GGGTAGGGAGGGGAGGAGGTTGCAAAAAGCCAGATGTGGGGGAAAAGTAACATCAACACTGTCCATCTCAGC
CTGAACTAGCTACCATCTGATCCCTCAGACATCTCAGGATTTTACAAGACTGTCAAGTGGGACACCCCTCC
CATTAAGAATGGGCGAGACTGGGGACAGTTTGAAGATGTGATGGTGGGGGGTGGGAGGACATGGGCGGGGG
CAGTCTCTCTCCTACTGTAACTGTGTAGTGTTCACAGAAAAAAACAAATGCACTTTTAAATAAAGAAATTT
CTTTTT

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FIGURE 1957A

AGAAGGTAGCAGACAGACAGCGGATCTAACCTCTCTTGGATCCTCCAGCCATGAGGCTGCTCTGGGGGCTGATC
TGGGCATCCAGCTTCTTACCTTATCTCTGAGAGGCCAGGTTGCTTCTTCTCTCTCTCTGTTGTTTATCTG
GGGGTCCCCATCCGGTGGGGTGACGCTCCAGGATGTGCCCGAGGACAGCTAGTGAAGGATCAGTGTTCCTG
AGAAACCCATCTCGTAATAATGTCCCCTGCTCCCCAAGGTTGAGCTTCAACCTTAGCTCAGAAAGAGACTTTCGA
CTCTCAGTCTCCAGGTGCCCTTTGAAAGATGCGAAGAGCTGTGGCTCCATCAACTCTCAGAGGACTTGAGTCTC
CAGCTGTGGTCCCTTTCGCAATGGCTAAAGGACTCTGTGTCCGAGACGACAACTCAGGGTATCAACCTGTCT
TTCTCTCTCTCGCCGGGGGCACTCTTTTTCGAGCGGACAGGCCATTACAACCTGGCCAGCGGGTTCGGTAC
CGGGTCTTTGCTCTGGATCAGAAGATGCGCCCGAGCACTGACCCATCAGCTCATGGTGGAGAACTCTCAGGC
CTCCGGCTGCGGAAAGAGAGGTTACATGCCCCCTGCTCCATCTTCCAGGATGACTTTTGATCTCCAGACATCTCA
GAGCCAGGAGACTGGAAGATCTCAGCCGATTCTCAGATGGCCTGGAATCCAAACAGCAGCACCCAGTTTGGGTG
AAGAAATATGTCTTCCCACTTTGAGGTGAAGATCACCCCTGGAAAGCCCTACATCTCAGCTGCCAGGCCAT
CTTGATGAATGCAGTTAGACATCCAGGCCAGGTACATCTATGGGAAGCCAGTGCAGGGGGTGGCATATGTGGCG
TTTGGGCTCTAGATGAGGATGGTAAGAAGACTTCTTTTGGGGGCTGGAGAGTGCAGCAAGCTGGTGAATGGA
CAGAGCCACATTTCCCTCTCAAAGGCAGAGTTCAGGACGCCCCGGAGAGCTGAATATGGGCATTATGACCTC
CAGGGGCTGCGCCTCTACGTTGTCTGAGCCATCATTAGTATCCAGGTGGGAGATGGAGAGGCGAGAGCTCA
TCTTGGTATTTGTGTCTCTCCCTCTCTTGGATCTTAGCAAGACCAAGGACACTTGTGCTCGGGGCCCC
TTCTGTGTCGAGGCCCTTGGTCCGTGAGATGTCAGGCTCCCCAGCTTCTGGCATTCCTGTCAAAGTTTCTGCCAC
GTGCTTCTCTCGGGTCTGTCTCTGAAGTCCAGGACATTAGCAAAACACAGACGGGAGGCCAATGCAGATT
CCAATAATATCTCTCAGACATCTCAGAGCTGCACTCTCAGTATCTCAGTATCTCAGGCTCCCCACATCCAGCGATAGCC
AGGCTCACTGTGGCAGCCCCACTTCCAGGAGGCCCGGGTTCGTCTATTGAGCGGCCGATTCTTGACCTCTCT
CGTGTGGGGACACTCTGAACCTTGCGAGGCTGGGAGCTGGGGCAGTGGGGCCACTTTCTCATTAATACATGAT
ATCCTATCCCGAGGGCAGATCGTGTTCATGAATCGAGAGCCCAAGAGGCCCTGACCTCGGCTCTGGTGTCTGTG
GACCATCACTGGCACCTCTCTTCTACTTTTGGCCTTCTACTACCATGGAGACCACCCAGTGGCCAATCCCTG
CGAGTGGATGTCCAGCTGGGGCTGCGAGGGCAAGCTGGAGCTCAGCGTGAGCTGGTGGCAAGCAGTACCGGAAC
GGGGAGTCCGTGAAGCTCCACTTAGAAACCGGACTCCTAGCCCTGGTGGCGCTGGGAGCTTGGACACAGCTCTG
TATGCTGCAGGCAGCAAGTCCCAAGGCCCTCAACATGGGCAAGGTTCTTGAAGCTATGAACAGCTATGACCTC
GGCTGTGGCTCTGGGGGTGGGGACAGTGCCTTTCAGGTGTTCCAGGCGAGCGGGCTGGCTTTTCTGATGGAGAC
CATGGGACCTTATCAGAAAGAGACTAAGCTGTCCCAAGGAGAAGACAACCGGAAAGGAGAAACGCTGAATCTC
CAAAAGCGATTAATGAGAAATGGGTGAGTATGCTTCCCCGACAGCCAGCGCTGTGCCAGGATGGGGTGACA
CGTCTGCCCATGATGCGTCTCTGCGAGCAGCGGGCAGCCCGCTGAGCAGCGGAGTCCGCGGAGCCCTTCTG
TCTCTGCTGCAATTTGCTGAGAGTCTGCGCAAGAAGAGCAGGGAACAAGGCCAAGCGGCTTCTCCAGAGAACTGGCTC
GAGATCTGCGCAGGAGGAGGCTGATGATGAGGATGACATTTCCGCTGCGCAGCTTCTTCCAGAGAACTGGCTC
TGGAGAGTGGAAACAGGTGGACCGCTTCAAATATTGACACTGTGGCTCCCCAGCTCTCTGACCAGTGGGAGATC
CATGGCTGAGGCTGTCAAACCAAGGCTTATGTGTGGCCACCCAGTCCAGCTCCGGGTGTTCGCGAGTTCTC
CACTGCACTCTCCGCTGCCCCATGTCTGTCCGCGCTTTGAGCAGCTGGAGCTGCGGCTGTCTCTATAACTAC
CTGGAATAAAACCTGACTGTGAGCGTCCAGTGTCCCCAGTGGAGGGGCTGTGCTGTGGTGGGGCGAGGGCTG
GCCACAGGCTGTGTGCTCTGCGGGCTCTGCGCGGCTGTGCTGTCTGTGTGGCCAGCGCAGCCCGCT
GTGTCTCTGAAGTGGTGGCTCGAGGGTCTTCAATTCCTGTGGGAGATGCGGTGTCCAAGGTTCTGAGATT
GAGAAGGAAGGGGCCATCCATAGAGAGGAGCTGGTCTATGAACCTCAACCCCTTGAGACCCAGGCGGAGCTT
GAAATACCTGGCAACTCTGATCCCAATATGATCCTGATGGGACTTTAACAAGCTACGTACAGGTTACAGGCTCA
GATCCATTGGACACTTAGGCTCTGAGGGGGCTTGTCAACAGGAGGCGTGGGCTCTCTTGGGCTCTCTCA
GGCTGTGGGAGCAAAACATGATCTACTTGGCTCCGACACTGGCTTCCGCTTACGACTGGACAGACAGAGCAG
TGGAGCACACTGCTCCGAGACCAAGGACCAAGCCGTGGATCTGATCCAGAAAGGCTACATCGCGATCCAGCAG
TTTCGGAAGGCGGATGGTTCTATGCGGCTTGGTGTGTCAGGGGCGAGCAGCTGGCTCACAGCTTTGTGTG
AAGGTCCTGAGTTTGGCCCGAGGACAGGTAGGAGGATCGCCTGAGAACTGCAGGAGACATCTAATCGGCTCTG
TCCAGCAGCAGGCTGACGGCTGCTCCAGGACTCTCTCCAGTGATACATAGGAGCATGCAAGGGGTTTGGT
GGCAATGATGAGACTGTGGCACTCAGCGCTTTGTGACCATGCCCTTCACTATGGGCTGGCGCTTCCAGGAT
GAGGGTGCAGAGCCATTGAAGCAGAGAGTGAAGGCTCCATCTCAAAGGCAAGCTCATTTTGGGGGAGAAAGCA

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FIGURE 1957B

AGTGCTGGGCTCCTGGGTGCCACGCAGCTGCCATCACGGCCTATGCCCTGACACTGACCAAGGCCCCCTGCGGAC
CTGCGGGGTGTGTGCCACAACAACCTCATGGCAATGCCCCAGGAGACTGGAGATAACCTGTACTGGGGCTCAGTC
ACTGTGTTCTCAGAGCAATGCCGTGTGCCCAACCCCGGCTCCTCGCAACCCATCCGACCCATGCCCCAGGCCCCA
GCCCTGTGGATTGAAACACAGCCTACGCCCTGCTGCACCTCCTGCTTACGAGGGCAAAGCAGAGATGGCAGAC
CAGGCTGCGGCTTGGCTACCCGTGAGGGCAGCTTCCAAGGGGGATTCCGCGAGTACCAAGACACGGTGATTGCC
CTGGATGCCCTGTCTGCCTACTGGATTGCCTCCACACCACTGAGGAGAGGGGTCTCAATGTGACTCTCAGCTCC
ACAGGCCGGAATGGGTTCAAGTCCCACGCGCTGCAGCTGAACAACGCCAGATTGCGGCCCTGGAGGAGGAGCTG
CAGTTTTCTTGGGCGCAAGATCAATGTGAAGGTGGGAGGAAACAGCAAAGGAACCTGAAGGTCTTTCGTACC
TACAATGTCTTGACATGAAGAACACGACCTGCCAGGACCTACAGATAGAAGTGACAGTCAAAGGCCACGTGAG
TACACGATGGAAGCAAACGAGGACTATGAGGACTATGAGTACGATGAGCTTCCAGCCAAGATGACCCAGATGCC
CCTCTGCAGCCCGTGACACCCCTGCAGCTGTTTGAGGGTCGGAGGAACCGCCGAGGAGGGAGGCCCAAGGTG
GTGGAGGAGCAGGAGTCCAGGGTGCACTACACCGTGTGCACTCTGGCGGAACGGCAAGGTGGGGCTGTCTGGCATG
GCCATCGCGGACGTACCCCTCCTGAGTGGATTCCACGCCCTGCGTGTGACCTGGAGAAGCTGACCTCCCTCTCT
GACCGTTACGTGAGTCACTTTGAGACCGAGGGGCCCCACGTCTCTGTGATTTTGACTCGGTCCCCACCTCCCGG
GAGTGCGTGGGCTTTGAGGCTGTGCAGGAAGTGCCGTTGGGCTGGTGCAAGCCGCCAGCGCAACCTGTACGAC
TACTACAACCCCGAGCGCAGATGTTCTGTGTTTACGGGGCACCAAGTAAGAGCAGACTTTGGCCACCTTGTT
TCTGCTGAAGTCTGCCAGTGTGCTGAGGGGAAGTGCCCTCGCCAGCGTCGCGCCCTGGAGCGGGGTCTGCAGGAC
GAGGATGGCTACAGGATGAAGTTTGCCCTGCTACTACCCCGGTGGAGTACGGCTTCAGGTTAAGGTTCTCCGA
GAAGACAGCAGAGCTGCTTTCCGCCCTCTTGAGACCAAGATCAACCAAGTCTGCACTTCAACAAGGATGTCAAG
GCCGCTGCTAATCAGATGCGCACTTCTGTGTTGAGGCCCTGCTGCGCCCTTGCTTGGAACTGGGAAAGAAATAT
TTGATCATGGGTCTGGATGGGGCCACCTATGACCTCGAGGACACCCCCAGTACCTGTGGACTCGAATAGCTGG
ATCGAGGAGATGCCCTCTGAACGCCCTGTGCCGAGCACCCGCCAGCGGACGCTGTGCCAGCTCAACGACTTC
CTCCAGGAGTATGGCACTCAGGGGTGCCAGGTGTCAGGGCTGCCCTCCCACCTCCGCTGGGAGGAACCTGAACCT
GGGAACCATGAAGCTGGAAGCACTGCTGTGTCGCTTTCATGAACACAGCTGGGACCAAGGGCATATTAAGGGCT
TTTGGCAGCAAGTGTGCTGTTGGC

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FIGURE 1958

MRLWLGLIWASSFFTL SLQKPRLLLFSPSVVHLGVPLSVGVQLQDVPRGQVVKGSVFLRNPSSRNVP CSPKVDFI
LSSERDFALLSLQVPLKDAKSCGLHQLLRGPEVQLVAHSPWLKDSLSRTTNIQGINLLFSSRRGHLFLQTDQPIY
NPGQVRVRYRVFALDQKMRPSTDTITVMVENSGLRVKKEVYMPSSIFQDDFVIPDI SEPGTWKISARFSDGLES
NSSTQFEVKKYVLPNFVEVKITPGKPYILTPVPHLDEMQLDIQARYIYGKPVQGVAYVRFGLLDEDGKKTFFRGLE
SQTCLVNGQSHISLSKAEFQDALEKLNMGITDLQGLRLYVAAAIIEYPPGEMEEAELTSMYFVSSPFLSLDSKTK
RHLVPGAPFLQLQALVREMSGSPASGIPVKVSATVSSPGSVPEVQDIQONTDGSQVSIPIIIPQTISELQLSVA
GSPHPAIARLTVAAPP SGPGFLSIEPDSRPPRVGDTLNLNLRAVGSGATFSHYIYMLSRGQIVFNMREP KRT
LTSVSVFVDHHLPAFSFYFVAFYYHGDHPVANSLRVDVQAGACEGKLELSVDGAKQYRNGESVKLHLETD SLALVA
LGALDTALYAAGSKSHKPLNMGKVFAMNSYDLGCGPGGGDSALQVQFQAAGLAFSDGDQWTL SRKRLSCPKEKTT
RKKRNVNPFQKAI NEKLGQYASPTAKRCCQDGVTRLPMMSRCEQRAARVQQPDCREPLSCCQFAESLRKKSRDKG
QAGLQRALEILQEEDLIDEDDIPVRSFFPENWLWRVETVDRFQILTLWLPDSLTTWEIHGLSLSKTKGLCVATPV
QLRVFREHFLHLRLMPSVRRFEQLELRPVLVNYLDKNLTVSVHVSPEVGLCLAGGGGLAQQLVPAGSARPVAFS
VVP TAAAVSLKVARGSFEPFVGDAVSKVLQIEKEGA IHREELVYELNPLDHRGRTLEIPGNSDPNMPDGDEN
SYVRVTASDPLDTL GSEGALSPPGVASLLRLPRGCGEQMTIYLAPTLAASRYLDKTEQWSTLP PETKDHAVDLIQ
KGYMRIQQFRKADGSYA A WLSRGSSTWLTAFVLKVLSLAQEQVGGSP EKLQETSNWLLSQQQADGSFQDLSPVIH
RSMQGGLVGNDETVALTAFVTIALHHGLAVFODEGAEP LKQVEASISKASSFLGEKASAGLLGAHAAAATAYAL
TLTKAPADLRGVAHNHNMAMAQETGDNLYWGSVTGSQSNVSPTPAPRNP SDPMPQAPALWIETTAYALLHLLH
EGKAEMADQAAA WLT RQGSFQGGFRSTQDVTIALDAL SAYWIASHTTEERGLNVTLSSTGRNGFKSHALQLNNRQ
IRGLEEELQFSLGSKINVKVGGNSKGT LKVLRTYNVLDMKNITTCQDLQIEVTVKGHVEYTM EANEDYEDYEYDEL
PAKDDPDAPLPQVTP LQLFEGRRNRNRREAPKVVEEQESRVHYTVCIWRNGKVLGSMIA DVTLSSGFHALRAD
LEKLTSLSDRYVSHFETEGPHVLLYFD SVPTISREC VGFEAVQEVVGLVQPASATLYD YNPERRC SVFYGAPSK
SRL LATLCSAEVCQCAEGKCFPRORRALERGLQDEDGYRMKFACYYPRVEYGFQVKVLR EDSRAAFRLFETKITQV
LHFTKDVKAAANQMRNFLVRASCRLRLEPGKEYLIMGLDGATYDLEGH PQYLLDSNSWIEEMP SERLCRSTRQRA
ACAQLNDFLQYEGTGQCQV

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FIGURE 1959

AGGGGAAGGGAATGTGACCAGGTCTAGGCTTGGAGTTTCAGCTTGGACACTGAGCCAAAGCAGACAAGCAAAGCAA
GCCAGGACACACCATCCTGCCCCAGGCCAGCTTCTCTCCTGCCCTTCCAACGCCATGCGGGAGCAATCTCAGCCCC
CAACTCTGCCTGATGCCCTTATCTTGGGCTCTTGCTGGAGGTGTGACCACCACTCCATGGTCTTTGGCCAG
CCCCAGGATCCTGCTCTCTGGAGGGGTAGAGATCAAAGCGCGTCTCTCCGACTTCTCCAAGAGGGCCAGGCA
CTGGAGTACGTGTGCTCTTCTGCTTCTACCCGTACCTCTGTGCAGACACGTACCTGCAGATCTACGGGGTCTTG
AGCACCTTGAAGACTCAAGACCAAAAGACTGTGAGGAAGGCAGAGTGCAGAGCAATCCACTGTCCAAAGCACAC
GACTTCGAGAAACGGGGAATCTGGCCCCGCTCTCCCTACTACAATGTGAGTGATGAGATCTCTTCCACTGCTAT
GACGGTTTACACTCTCCGGGGCTCTGCCAATCGCACCTGCCAAGTGAATGGCCGTGGAGTGGGCAGACAGCGATC
TGTGACAACGGAGCGGGTACTGCTCCAACCCGGGCATCCTCATTTGGCACAAGGAAGTGGGCAGCCAGTACCGC
CTTGAAGACAGCGTCACTTACCCTGCAGCCGGGGCTTACCCTGCGTGGCTCCAGCGGCGAAGCTGTGAGGAA
GGTGGCTCTTGGAGCGGGACGGAGCCTTCTGCCAAGACTCCTTCATGTACGACACCCCTCAAGAGGTGGCCGAA
GCTTTCTGTCTTCCCTGACAGAGACCATAGAAGGAGTGCATGCTGAGGATGGGCACGGCCAGGGGAACAACAG
AAGCGGAAGATCGTCTGGACCTTCAAGGCTCCATGAACATCTACCTGGTGCTAGATGGATCAGACAGCATTGGG
GCCAGCAACTTCAAGGAGCCAAAAGTGTCTAGTCAACTTAATTGAGAAGGTGGCAAGTTATGGTGTGAAGCCA
AGATATGGTCTAGTGACATATGCCACATACCCAAAAATTTGGGTCAAAGTGTCTGAAGCAGACAGCAGTAATGCA
GACTGGGTCAAGAGCAGCTCAATGAAATCAATTATGAAGACCACAAGTTGAGTCAAGGACTAACACCAAGAAG
GCCCTCCAGGCAGGTGACAGCATGATGAGCTGGCCAGATGACGTCCCTCTGAAGGCTGGAACCGCACCCGCCAT
GTCATCATCTCTGACTGATGGATTGCAACAACATGGGCGGGAGCCCAATTACTGTCATTGATGAGATCCGGGAC
TTGCTATACATTGGCAAGGATCGCAAAAACCAAGGGAGGATTATCTGGATGTCTATGTGTTGGGGTGGGGCT
TTGGTGAACCAAGTGAACATCAATGCTTTGGCTTCCAAGAAAGACAATGAGCAACATGTGTTCAAAGTCAAGGAT
ATGGAACCACTGGAAGATGTTTTCTACCAAAATGATCGATGAAGGCCAGTCTCTGAGTCTCTGTGGCATGGTTTG
GAACACAGGAAGGTTACGATTACCCACAAGCAACATGGCAGGCCAAGATCTCAGTCAATCGCCCTTCAAAGGGA
CACGAGAGCTGTATGGGGCTGTGGTGTCTGAGTACTTTGTGCTGACAGCAGCATTGTTTCACTGTGGATGAC
AAGGAACACTCAATCAAGTCAAGTCAAGTCAAGGAGGGAGAGCGGGACCTGGAGATAGAAGTGTCTTATTCACCCC
AACTACAACATTAAATGGGAAAAAAGAGCAGGAATTCCTGAATTTATGACTATGACGTTGCCCTGATCAAGCTC
AAGAATAAGCTGAATATGGCCAGACTATAGGCCCATTTGTCTCCCTGCACCCAGGGAACAACACTCGAGCTTTG
AGGCTTCTCTCAACTACCCTTGCAGCAACAAGGAAGAGCTGCTCCCTGCACAGGATATCAAGCTCTGTTT
GTGCTGAGGAGGAGAAAAAGCTGACTCGGAAGGAGGTCTACATCAAGAAATGGGGATAGAAGAGGCAGCTGTGAG
AGAGATGCTCAATATGCCCCAGGCTATGACAAAGTCAAGGACATCTCAGAGGTGGTCAACCCCTCGGTTCTCTTGT
ACTGGAGGAGTGAGTCCCTATGCTGACCCCAATACTTGCAGAGGTGATCTGGCGGCCCTTGATAGTTCACAAG
AGAAGTCTGTTTCAATCAAGTTGGTGAATCAGCTGGGGAGTGTGGATGTCTGCAAAAACAGAGCGGCAAAAG
CAGGTACCTGCTCAGCCCGAGACTTACATCAACCTCTTCAAGTGTGCGCTGGCTGAGGAGAACTCCAA
GATGAGGATTTGGGTTTTCTCTAAGGGGTTTCTGCTGACAGGGGCGTGGGATTGAATTAACACAGCTGCGACA
AC

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FIGURE 1960

MGSNLSPLQLCLMPFIILGLLSGGVTTTPWSLAQPQGSCLSEGV EIKGGSFRLLQEGQALEYVCPSGFYYPVQVQTRT
CRSTGWSWTLTKTQDKTVRKAECRAIHCPRP HDFENG EYWPRSPYYNVSD EISFHCYDGYTLRGSANRTCQVNGR
WSGQTAICDNAGAGYCSNPGIPIGTRKVGSSQYRLDSVTYHCSRGLTLRGSQRRTCQEGGSWSGTEPSCQDSFMYD
TPQEVAAEAF LSSLTETIEGVDAEDGHGPGEQQKRKIVLDPGSGSMNIYLVLDGSDSIGASNFTGAKKCLVNLIEKV
ASYGVKPRYGLVIYATYPKIWVKVSEADSSNADWVTQ LNEIN YEDHKLKSGINTKKALQAVYSMMSPDDVPPE
GWNRTRHV IILMDGLHNMGGDPITVIDEIRDLLYIGKDRKNPREDYLDVYVFGVGFLVNQVNNALASKKDNEQ
HVFKVKDMENLEDVFYQ MIDESQSLSLCGMVWEHRKGT DYHKQPWQAKISVIRPSKGHESCMGAVVSEYFVLTA A
HCFTVDDKEHSIKVSVGGEKRDLEIEVVL FHPN YNINGKKEAGIPEFYDYDVALIKLKNKLKYGTIRPICLPCT
EGTTRALRLPPTTTCQQQKEELLPAQDIKALFVSEEEKLTRKEVYIKNGDKKGCERDAQYAPGYDKVKDISEV
VTPRFLCTGGVSPYADPNTCRGDSGGPLIVHKRSRFIQVGVISWGVVDVCKKNQKRQKQVPAHARDFHINLFQVLP
WLKEKLQDEDLGFL

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FIGURE 1961

GGTCCCAAGGCTTTCCAGAGCGAACCTGTGCGGCTGCAGGCACCGCGCTGTGAGTTTCCGGCGTTCCGAAGGAC
TGAGCTCTTGTGCGGATCCCGTCGCGGTTTTCCAGCCCCAGTCTCAGAGCGGAGCCACAGAGCAGGGCACC
GCATGGCCAAAGCCGCGCGATCGGCATCGACCTGGGCACCACTACTCCTGCGTGGGGGTGTTCCAACACGGCA
AGGTGGAGATCATOGCCAAACGACCAGGGCAACCGCACCCCCAGCTACGTGGGCTTACGGACACCGAGCGGC
TCATCGGGATGCGGCAAGAACCGAGTGGCGCTGAACCCGAGAACACCGTGTGACGCGAAGCGGCTGATCG
GCCGAAGTTTCGGCGACCGGTGGTGCAGTCGGACATGAAGCACTGGCCTTCCAGGTGATCAACGACGGAGACA
AGCCCAAGGTGCAAGTGAGCTACAAGGGGAGACCAAGGCATTCTACCCGAGGAGATCTCGTCCATGGTGCTGA
CCAAGATGAAGGAGATCGCGAGGCGTACTGGGCTACCCGGTGACCAACGCGGTGATCACCGTGGCGGCTACT
TCAACGACTCGCAGCGCCAGGCCACCAAGGATGCGGGTGTGATCGCGGGGCTCAACGTGCTGCGGATCATCAACG
AGCCCACGGCCGCGCCATCGCTACGGCCTGGACAGAACGGGCAAGGGGAGCGCAACGTGCTCATCTTTGACC
TGGGCGGGGCACTTCGACGTGTCCATCCTGACGATCGACGACGGCATCTTCAGGTGAAGGCCACGGCCGGGG
ACACCCACCTGGGTGGGAGGACTTTGAACAAGCGTGGTGAACCACTTCGTGGAGGAGTTCAAGAGAAAAACA
AGAAGGACATCAGCCAGAACAGCGAGCCGTGAGGCGGCTGCGCACCCGCTGCGAGAGGCCAAGAGGACCTGT
CGTCCAGCACCCAGGCCAGCTGGAGATCGACTCCCTGTTTAGGGCATCGACTTCTACAGTCCATCACCAGGG
CGAGGTTGAGGAGCTGTGCTCCGACCTGTTCCGAAGCACCTTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCA
AGCTGGACAAGGCCAGATTACGACCTGGTCTTGGTGGGGGCTCCACCCGATCCCCAAGGTGCAAGAGCTGC
TGCAGGACTTCTTCAAGGGGCGGACCTGAACAAGAGCATCAACCCGACGAGGCTGTGGCTTACGGGCGGGCGG
TGCAGGCGGCCATCTGATGGGGACAAGTCCGAGAACGTGCAGGACCTGCTGCTGCTGGACGTGGCTCCCTGT
CGCTGGGGCTGGAGACGGCGGAGGCGTGATGACTGCCCTGATCAAGCGCACTCCAACATCCCCACCAAGCAGA
CGCAGATCTTACCACCTACTCCGACAACCAACCCGGGTGCTGATCCAGGTGTACGAGGCGAGAGGGCCATGA
CGAAAGACAACAATCTGTTGGGCGCTTCGAGCTGACGGGCATCCCTCGGCGCCCAAGGGGCGTGGCCAGATCG
AGGTGACCTTCGACATCGATGCCAAGGGCATCCTGAACGTACCGGCCACGGACAAGACACCGCAAGGCCAGCA
AGATCACCATCACAACGACAAGGGCGCGCTGAGCAAGGAGGAGATCGAGCGCATGGTGACGAGGCGGGAGAAT
ACAAAGCGGAGGACGAGGTGCGAGCGGAGGGGTGTCAGCCAAGAAGCGCCCTGGAGTCTACGCCCTTAACATGA
AGAGCGCGGTGGAGGATGAGGGGCTCAAGGGCAAGATCAGCGAGGCGGACAAGAAGAGGTTCTGGACAAGTGTG
AAGAGGTCTCTGTTGGCTGGACGCCAACACCTTGGCCGAGAAGGACGAGTTTGAGCAACAAGAGGAAGGAGCTGG
AGCAGGTGTGTAACCCCATCATCAGCGGACTGTACAGGGTGCGGTTGGTCCCGGCGCTGGGGGCTTCGGGGCTC
AGGGTCCCAAGGGAGGGTCTGGGTACGGCCCTACCAATTGAGGAGGTGGATTAGGGGCTTGTGTTCTTAGTATGT
TTGCTTTGAGGTGGACTGTTGGGACTCAAGGACTTTGCTGCTGTTTTCTATGTCATTCTGCTTCAGCTCTT
GCTGCTTCACTTCTTTGTAAGTTAAGTTGTAACCTGATGGTAATTAGCTGGCTTCATTATTTTTGTAGTACAAC
CGATATGTTCAATAGAATTTCTTTGCATTTAATGTTGATACTGTAAGGGTGTTCGTTCCCTTTAAATGAATCAAC
ACTGCCACCTTCTGTACGAGTTTGTTTCTTTTTTTTTTTTTTTTTTTTTTTTTTTTGGCGGCAAACTACAAAGGC
TGGGAATGTAATGTTTATAATTTGTTTATTTAAATATGAAAATAAAATGTTAAACTTT

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FIGURE 1962

MAKAAAIGIDLGTYSVGVFQHGKVEIIANDQGNRTTPSYVAFDTTERLIGDAAKNQVALNPQNTVFDKRLIG
RKFGDPVVQSDMKHWPQVINDGDKPKVQVSYKGETKAFYPEEISSMVLTKMKEIAEAYLGYPVNAVITVPAYF
NDSQRQATKDAGVIAGLNLVRI INEPTAAAIAYGLDRTGKGERNVLIFDLGGGTFDVSILTIIDDGIFEVKATAGD
THLGGEDFDNRLVNHFEFVKRKHKKDISQNKRAVRRRLTACERAKRTLSSSTQASLEIDSLEEGIDFYTSITRA
RFEELCSDLFIRSTLEPVEKALRDAKLDKAQIHDLVLVGGSTRIPKVQKLLQDFFNGRDLNKSINPDEAVAYGAAV
QAAIIMGDKSENVQDLLLLDVAPLSLGLETAGGVMTALIKRNSTIPTKQTQIFTTYSDNQPGVLIQVYEGERAMT
KDNNLLGRFELSGIPPAPRGVPQIEVTFDIDANGILNVTATDKSTGKASKITITNDKGRLSKEEIERMVQEAKEY
KAEDDEVQRERVSAKNALESYAFNMKSAVEDEGLKGKISEADKKKVLDKQCEVISWLDANTLAEKDEFEHKRKELE
QVCNPIISGLYQGAGGPGGGFGAQGPKGSGSGPTIEVD

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FIGURE 1963

GCTGCTGCGCAGCTCCACTACCTTTTTTCGAGAGTGACTCCCGTTGTCCCAAGGCTTCCAGAGCGAACCTGTGCG
GCTGCAGGCACCGGCGCTCGAGTTTTCCGGCGTCCGGAAGGACCGAGCTCTTCTCGCGGATCCAGTGTTCGGTT
CCAGCCCCCAATCTCAGAGCCGAGCCGACAGAGAGCAGGGAACCGGATGGCCCAAAGCCGCGCGATCGGCATCG
ACCTGGGCACCACTACTCCTGCTGGTGGGGTGTTCACACCGGCAAGGTGGAGATCATGCCAACGACCAGGGCA
ACCGCACCACCCAGCTACGTGGCCTTACGAGACCCGAGCGGCTCATCGGGATGCGGCCAAGAACCAGGTGG
CGCTGAACCCGCAACAACCGTGTTTGACGCGAAGCGGCTGATCGGCCGAAGTTCCGCCGACCCGTTGGTGCAGT
CGGAGATGAAGCACTGGCCTTTCAGGTGATCAACGACGAGACAAAGCCAAAGTGCAGGTGAGCTACAAAGGGG
ACACCAAGGCATTCTACCCCGAGGAGATCTCGTCCATGGTGCTGACCAAGATGAAGGAGATCGCCGAGGCGTACC
TGGGCTACCCGGTGACCAACGCGGTGATCACCCTGCCGCGCTACTTCAACGATCGCAGCGCCAGGCCACCAAGG
ATGCGGGTGTGATCGCGGGGCTCAACGTGCTCGGATCATCAACGAGCCACGGCCGCGCCATCGCCTACGGCC
TGGACAGAACGGGCAAGGGGAGCGCAACGTGCTCATCTTTGACCTGGGCGGGGCACTTCGACGTGTCCATCC
TGACGATCGACGACGGCATCTTCGAGGTGAAGGCCACGCGCGGGGACACCCACTGGGTGGGGAGGACTTTGACA
ACAGGCTGGTGAACCACTTCGTGGAGGATTCAGAGAAAACACAAGAAGGACATCAGCCAGAACCAAGCGAGCCG
TGAGGCGGCTGCGCACCCGCTGCGAGAGGGCCAAAGGACCCCTGTCGTCCAGCACCCAGGCCAGCCTGGAGATCG
ACTCCTGTTTGAGGGCATCGACTTTACACGTCCATCACCAGGGCGAGGTTTCGAGGAGCTGTGCTCCGACCTGT
TCGGAAGCACCCCTGGAGCCCGTGGAGAAGGCTCTGCGCGACGCCAAGCTGGACAAGGCCAGATTACGACCTGG
TCTTGGTCGGGGCTCCACCCGCATCCCCAAGGTGCAGAACTGCTGCAGGACTTCTTCAACGGGCGCAGCTGA
ACAAGAGCATCAACCCGACGAGGCTGTGGCTACGGGGCGCGGTGCAGCGGCCATCTGATGGGGGCAAGT
CCGGAAGCTGCGAGGCTGTGCTGGAGCTGGCTCCCTGTCGTGGGGCTGGAGACGGCCGAGGGCGTGA
TGACTGCCCTGATCAAGCGCAACTCCACCATCCCAAGCAGACGAGATCTTCAACCACTACTCCGACAAC
AACCCGGGGTGTGATCCAGGTGTACGAGGGCGAGGGCCATGACGAAAGACAACAATCTGTTGGGGCGCTTCG
AGCTGAGCGGCATCCCTCCGGCCCCAGGGGCGTGCCCCAGATCGAGGTGACCTTCGACATCGATGCCAAGCGCA
TCCTGAACGTACGGCCACGGAACAAGACACCGCAAGGCCAACAGATCACCATCACAACGACAAGGGCCGCC
TGAGCAAGGAGGAGATCGAGCGCATGGTGCAGGAGCGGAGAAATACAAAGCGGAGGACGAGGTGACGCGGAGA
GGGTGTGAGCCAAGAAGCCCTGGAGTCTACGCCCTCAACATGAAGAGCGCCGTGGAGGATGAGGGGCTCAAGG
GCAAGATCAGCGAGGCCGACAAGAAGAAGGTGCTGGACAAGGTGTCAGAGGTGATCTCGTGGCTGGACGCCAACA
CCTTGCGCGAGAAGGACGAGTTTGAGCACAAGAGGAAGGAGCTGGAGCAGGTGTGTAACCCCATCATACGCGGAC
GTGACCAGGTTGCCGTGGTCCCGGGCTGGGGGCTTCGGGGCTCAGGGTCCCAAGGAGGGTCTGGGTGAGGCC
CCACCATTGAGGAGGTAGATTAGGGGCGCTTCCAAAGATTGCTGTTTTTGGAGCTTCAAGACTTTGCAATTT
CCTAGTATTTCTGTTTGTGAGTTCTCAATTTCTGTGTTTGCATGTTGAAATTTTGGTGAAGTACTGAACTT
GCTTTTTTTCGGTTTCTACATCGAGAGATGAATTTTACTGCCATCTTACGACTATTTCTGCTTTTTAATACAC
TTAACTCAGGCCATTTTTTAAAGTGGTTACTTCAAAGTAATAAATCTTAAATTCAGGTGA

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FIGURE 1964

MAKAAAIGIDLGTTCVGVFQHGKVEI IANDQGNRTTPSYVAFDTDERLIGDAAKNQVALNPQNTVFDARRLIG
RKFGDPVVQSDMKHWPQVINDGDKPKVQVSYKGDTKAFYP EEI SSMVLTKMKEIAEAYLGYPVITNAVITVPAYF
NDSQRQATKDAGVIAGLNVLR IINEPTAAAIAYGLDRTGKERNVLIFDLGGGTFDVSILTIDDGIFEVKATAGD
THLGGEDFDNRLVNHFEVEEFKRKHKKDISQNKRAVRRRLTACERAKRTLSSTQASLEIDSLEFEGIDFYTSITRA
RFEELCSDLFRSTLEPVEKALRDAKLDKAQIHDVLVGGSTRI PKVQKLLQDFFNGRDLNKSINPDEAVAYGA AV
QAA ILMGDKSENVDLLLLDVAPLSLGLETAGGVMTALIKRNSTIPTKQTQIFTTYSNDQPGVLIQVYEGERAMT
KDNLLGRFELSGIPAPRGVPQIEVTFDIDANGILNVTATDKSTGKANKITITNDKGRLSKEEIERMVQEA EKY
KAEDEVQRERVS AKNALESYAFNMKSAVEDEGLKGKISEADKKKVLDKCQEVISWLDANTLAEKDEF EHKRKELE
QVCNPIISGLYQAGGPGPGGFGAQGP KGGSSGGPTIEEV D

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FIGURE 1965

GGCTTCCTCCTCCCCCTCTACTCTACCCAGCTTGCGCTCCCCAGCCGCAAGTCGGCCGGCTTTGCCCGTCAGCGC
TTGGAGCTTTCTGCGTCGCTTCCCGCTGCGCCTGCGCGGTCCCCGCTCGCCCCACGCGCGGGCTCGCGCTTCGGT
TTCCCCAGACCTGCTCGCAGCACCTTGCTGCTTCCCGGTCCGGCCGCTGCCCGCGGCGCCAGCACCATGCTCT
TCTATTCTTTTTCAAGTCCCTTGTGGGCAAGGATGTGGTCTGGAATAAGAAATGACCTGAGCATCTGTGGAA
CCCTCCATCTGTGGATCAGTATCTCAACATCAAATACTGACATCAGTGTACAGACCTGAGAAATACCTC
ACATGTTATCAGTGAAGAAGTCTTCAATCGGGGCTCAGTGTCCGATACGTGCAGCTGCCAGCAGATGAGGTG
ACACACAGTTGCTACAGGATGCGGCAAGGAAGGAAAGCCCTGCAGCAGAAACAGTGATGGCTCCTCCTCTTCC
CCTCCTCTTTTATTGGTGACCCATAACCCCAAGTCCCAGCCAGAACCCCTAACCCCAATACTGAAGGGGTT
TTGTTTTTTTACTAATGATGGTTTTTGGGTTTTTTTTTAAGGGATGAGTGGATGAGAGGAGTAATAGGGAACAG
TATCCTCTCTTGAGAAGGGGAGGATAAGTAGGCTGGGAACTTCAAAGCCTTCCCAGTCCCAGCACCTGCCTTT
CTCACTACTTCTCTGAGATGGTAGGAGTTTCTAGGTCTTCCAGGGCAGCATGTGATTCAATTGGGGATG
AAGGAATCTGCCCGCATCGGGAATAAAATTTATGATG

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FIGURE 1966

MLFYSPFKSLVGKDVVVELKNDLSICGTLHSVDQYLNKLTDISVTDPEKYPHMLSVKNCFIRGSVVRYVQLPAD
EVDTQLLQDAARKEALQKQ

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FIGURE 1967A

GT CACA AAGGGGGGAACAGCTGGGCGCCGGCTGCCGGGGCGCGATCTTAGGGAAC TAGGGTCACCTGGAGAGCC
GCCACCGCTGTCTGCCCGCTCGACTCTCTCCGCCGGGGCGCTCGGCCGGTCCAGCGCGGCCCGGCGCTGGCTGT
GAGGTGGATTCCGGGCCGATCTCGACCATCTCCCTCAGATTTTCCACTTCGTTCGGACCTTCTCTAATCACTATGT
CCACCCCTCTACGTCTCCCCCTCACCAGATGCCTTCCCAGCCTCCGAGCCCTATAGCCGCTCGCTATGGGGAGG
CTGGGAGGGTCCCGGATGGGAGGAGGCCACCCCGCATCTGTCTCCAGCACCCCGCAGCTAGCAGGACTCCCT
TTCCCCACCCCGCTGCCCGCCCTGGAGCAGGGGCCCGCTGGGCTGTGGGTGTGGGGGGCCACGGCTGTGGCC
AGCTGCTGTGGCCAGCAGGCTTGGGGGGCCAGGGGGCAGCGGGCGGCTGCTCTGTCCAACAGTGGGTGAGT
ACGCCGACACGGAGTTAATACCACTGCTGTGGAGCAACGCTGCCGCGCTGGGACTCCGAAGCTCGCGCCAGG
ACCCCGAGGCTGTGTGGGGGCCCTGGGCAGGGCCCTGAGCCCTTGGAGGAGTGGCTTCGGCTGCACACCTACT
TGGCGGGGAGGCCCCACCTGTGGCTGACTTGGCGGCTGTCAACAGCCTTGTCTGCTGCCTTTCCGATACGTCCTAG
ACCCACCTGCCCGCCGATCTGGAATAATGTGACTCGCTGGTTGTACGCTGTGTCCGGCAGCCAGAATTCCGAG
CCGTGCTAGGAGAAGTGGTCTATACTCAGGAGCCAGGCTCTCTCTCATCAGCCAGGCCCCGAGGCTCCTGCC
TCCCAAAGACAGCTGCTCAGCTCAGAAGAGGGCAAGAAACGGGAGAAGCTAGAGAAATTCACAAGAACGAGA
AGATCAAACAGCAGCAGCCACCTCCAGGGGAGAAGAAACCAAAACAGAGAAGAGGGAGAAACGGGATCCTGGG
TCATTACCTATGACCTCCCAACCCACCCGGGAAAAGAAAGATGTGACTGGGCCCATCGCCGACTCTACAGCC
CTCGGTATGTGGAGGCTGCTGGTACCTTGGTGGGAGCAGCAGGCTTCTCAAGCTCAGATATGGGGCTCCTA
ATGTGTGACGAGCAAAICCCGAGGTGTCTTCATGATGTGCATCCACCCCCCAATGTGACAGGCTCCCTGCACC
TGGCGCTGACACTACCAACGCCATCCAGGACTCCCTGACTCGATGGCACCAGTACGGTGGGGAGACCACCTGT
GGAACCTGGCTGTGACCATGCAAGTATGCCAACCAAGTGGTGGTGGAGAAGACTATGGCTGAGCAGGGAC
TGAGCCGGCAGCAGCTGGGCGGGAGGCCCTTCTACAGGAAGTCTGGAAGTGGAAAGGAGAGAAGGTGACCGGCA
TTTACCACAGTTGAAGAAGCTTGGCAGCTCCTTGGACTGGGATCGAGCCGTGTTCACCATGTACCTCAACTCT
CAGCAGCTGTGACAGAGGCCCTTTGTCCGGCTTCAGGAGGAAGGCATCATCTATCCGACTACCCGCCCTTGTAACT
GGTCTCTGACCCCTCACTCCGCCATCTCTGACATTGAGGTGGATAAGAAGGAGCTGACAGGTGCGACCCCTGCTCT
CCGTGCTGGCTGACAAGGAGAAGTGGAGTTCGGGGTCCCTGCTGCTTTGGCTATAAGGTCCAAGGCTCAGATA
GCGACGAGGAGGTGGTGGTGCAACAACCTCGGATCGAGACAATGCTGGGAGATGTGGCTGTAGCTGTGACCCCA
AAGATACAGATACCAAGCAGCTGAAGGGGAAGAAGCTGATCCACCCATCTCTGTCTCGGAGCCTTCCCATGTCT
TCGATGAATTTGTGGACATGGACTTTGGCACAGGTGCTGTGAAGATCACCCCGCACATGACCAAAATGACTATG
AAGTTGGGCAGCGGCACGGGCTGGAGGCCATCAGCATCATGGACTCCCGGGGGGCCCTCATCAATGTGCCCTCG
CTTTCCTGGGCTGCCCAGGTTTGTAGGCCAGGAAGCGGTGCTGGTGCGCTGAAGGAGCGGGGACTGTCCGCT
GCATTGAGSACAACCCCATGTGTGTGCCACTTTGCAACCGGTGCAAGGACGTGGTAGAGCCTCTGCTCGCGCCGC
AGTGGTACGTTGCTCGGGGAGATGGCCAGGCTCGCAGCGCCGCTGTGACTCGGGTGACCTCCGATCCTGCT
CTGAGGCCCATCAGCGGCATGGCATGCTGCTGGATGGACAACATCCGGGAGGCTGGTGCTTTTACAGGACGCTGGT
GGGGCCATCGCATCCGACCTACTTTGTCTACGTGTCAGTGACCCAGCGGTGCCCTCGGGGAGGACCTGTATGGGC
GGTACTGGGTGAGTGAGCAGCAATGAGCGGAGGCCGGAGAAGGCAGCCAGGAGTTCGGAGTGTCCCTGACA
AGATCAGTCTCCAGCAAGATGAGGATGTATTGGATACCTGGTCTCTCTCGGCCCTTCCCTTATCCATTTTGG
GCTGGCCCAACAGCTCAGAAGACCTGAGTGTGTCTACCCCGGGACACTGCTGGAGACCGGTCATGACATCCTCT
TCTTCTGGGTGGCCGAGTGTGATCTGCTGGCCCTGAAGCTCAGGGCAGGCTGCCCTTTAGAGAGGCTCTACCTC
ATGCCATCGTGGCAGATGCTCAGGCGCGGAAGATGAGCAAGTCTCTAGGCAATGTCTATCATCCCTGGATGTCA
TCTATTGAAATCTCCCTGAGGCGCTCCACAACCACTGCTGTGAACAGCAACTGATCCGAGCAGGTTGGAGAAG
CCAAAGAAGGGCAGAAGCTGACTTCCAGCGGGGATCTCTGAATGTGGACCAAGTGTCTCCGGTTTGGATTAT
GTGCCATCATGTGCCAGGTCGTGACATCAACCTGGATGTGAACCGGATATGGGTTACCGGCACCTTCTGCAACA
AGCTCTGGAATGCCCAAGTTTGGCCTTCTGGCCCTGGGAAGGGTTTGTGGCCCTACCAACCTCCAGCCCGG
GAGGCCATGAGAGCCTGTGTGAGCCGTGGATCCGAGCGCCTGACAGAGGCTGTGAGGCTCAGCAATCAAGGCT
TCCAGGCTCTACGACTTCCGCGCGTCACCACTGCCAGTACAGCTCTGGCTCTGTAGCTCTGTATGTGCTACT
TGGAGTGCCTGAACCTGTACTGTAATGGGGTGACAGGTCAGGTCAGGTGTGCCCGCCAGCCCTGTACACTT
GCCGTGAGCTGTGGCTCGGGCTGCTCTACCCCTTCAAGCCTTCTGTGACGGAGAGCTGTGTCCAGAGCTCGCCC
GGAGGCTCCGCAAGCTCCCCCTAGGCTCTGTGTTACCCCTACAGGAGGCCCTCAGAGTCTCTGTGAGGAGACC
CCGAGGCAGAAGCCGCCCTTGAAGTGGCGCTAAGCATACGCGAGCGGTGCGCTCCCTCGGGCCGACTACAACC

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FIGURE 1967B

TCACCCGGATCCGGCCTGACTGTTTCCTGGAAGTGGCGGATGAGGCCACGGGCGCCCTGGCATCGGCGGTGTCGG
GCTACGTGCAGGCCCTGGCCAGCGCAGGTGTGGTGGCTGTTCTGGCCCTGGGGGCTCCGCCCCCAGGGTTGCG
CTGTGGCTCTGGCTTCTGATCGCTGCTCCATCCACCTGCAGCTTCAGGGGCTGGTGACCCTGCACGGGAGCTGG
GCAAGCTGCAAGCCAAGCGAGTTGAGGCCAGCGGCAGGCCAGCGTCTGCGGGAACCCGTGCTGCCTCGGGCT
ATCCTGTCAAGGTGCCCTCGAAGTCCAGGAGGCAGATGAAGCCAAGCTCCAACAGACAGAAGCAGAGCTCAGGA
AGGTGGATGAGGCCATCGCCCTATTCCAGAAGATGCTGTCATCCACCACCCAGCTTACCCCTACCCCCAGCGG
CTCACCATGGGGATGGCAGCAATAAATATTTCCCAAAAA

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FIGURE 1968

MSTLYVSPHPDAFPSLRALIAARYGEAGEGPGWGAHPRICLQPPPTSRTPFPFPPRLPALEQGPGLWVWGATAV
AQLLWPAAGLGGPGGSRRAAVLVQQWVSADTELIPACGATLPALGLRSSAQDPQAVLGALGRALSPLEENLRHT
YLAGEAPTLADLAAVTALLPFRYVLDPARRIWNVTRNFVTCVRQPEFRAVLGEVVLYSGARPLSHQPGPEAP
ALPKTAAQLKKEAKKREKLEKFQQKQKIQQQQPPGGEKKPKPEKREKRDPGVITYDLPTPPGEKKDVSGMPDSY
SPRYVEAAWYPWWEQQGFPEYGRPNVSAANPRGVFMMCIPPPNTGSLHLGHALTNAIQDSLTRWHMRGETT
LWNP GCDHAGIATQVVVEKKLWREQGLSRHQLGREAFLEVVWKKKEEGDRIYHQLKKLGS SLDWDRACFTMDPK
LSAAVTEAFVRLHEEGIYRSTRLVNWSCTLNSAISDI EVDKKELTGRITLSVP GYKEKVEFGVLVSFAYKVQGS
DSDEE VVATTRIETMLGDVAVAVHPKDRYQHLKGKNIHPFLSRSLP I VFEFVDMDFGTGAVKITPAHDQND
YEVGQRHGLEAISIMDSRGALINVPFFLGLPRFEARKAVLVALKERGLFRGIEDNPMVVP LCNRSKDVVEPLL
PQWYVRCEGEMAQAASAAVTRGDLRI LPEAHQRTWHAWMDNIREWCISRQLWGWHRIPAYFVTVSDPAVPPGEDPD
GRYVWSGRNEAEAREKAAKEFGVSPDKISLQDQEDVLD TWFS SGLFPLSILGWPNQSEDLSVFYPGTLLTGHDI
LFFWVARVMVLGKLITGRLPFREYVLHAIVRDAHGRKMSKSLGNVIDPLDVIYGISLQGLHNQLNLSNLDPSEVE
KAKEGQKADFPAGIPECGIDALRFLGCAYMSQGRDINLDVNRILGYRHFNCNKLWNATKFAIRGLGKGFVPSFTSQ
PGGHESLVDWRWIRSRLTEAVRLSNQGFAYDFFAVTTAQYSFWLYELCDVYLECLKPVLINGVDQVAACARQTLTY
TCLDVGLRLLSPFMPFVTEELFORLPRRMPQAPP SLCVTYPEPSECSWKDPEAEAELEALSITRAVRS LRADY
NLTRIRPDCFL EVADEATGALASAVSGYQALASAGVVAVLALGAPAPQGC AVALASDRCS IHLQLQGLVD PARE
LGKLQAKRVEAQRQAQRLRERRAASGYPVKVP LEVQEAD EAKLQQTAEALRKVDEAIALFQKML

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FIGURE 1969

GC GGCTCTCTGATCCAGCCCGGAGAGGACCGAGCTGGAGGAGCTGGGTGTGGGGTGCCTTGGGCTGGTGGGGAG
GCCTAGTTTGGGTGCAAGTAGGCTCTGATTGAGCTTGTGTTGTGCTGAAGGGACAGCCCTGGGCTAGGGGAGAGA
GTCCCTGAGTGTGAGACCCGCTTCCCGGTCCAGCCCTCCAGTTCCCCAGGGACGGCCACTTCTGGTCC
CCGACGCAACCATGGCTGAAGAACAACCGCAGGTCGAATTGTTCTGTGAAGCTGGCAGTGATGGGSCCAAGATTG
GGAAGTGGCCATTCTCCAGAGACTGTTCTATGGTACTGTGGCTCAAGGGAGTCACCTTCAATTGTACACCGTTG
ACACCAAAAGCGGACCGGAGACAGTGCAGAAGCTGTGCCCAAGGGGGCAGCTCCCATTCCTGCTGATGGCACTG
AAGTGCACACAGACCCAACAAGATTGAGGAATTTCTGGAGGCAGTGCTGTGCCCTCCAGGTACCCCAAGCTGG
CAGCTCTGAACCTGAGTCCAACACAGCTGGGCTGGACATAITTGCCAAATTTTCTGCCTACATCAAGAATTCAA
ACCCAGCACTCAATGACAATCTGGAGAAGGGACTCCTGAAAGCCCTGAAGGTTTATAGCAATTAACATCCC
CCCTCCAGAGAAGTGGATGAAACCAAGTGCTGAAGATGAAGGTGTCTCAGAGGAAGTTTTTGGATGGCAACG
AGCTCACCTGGCTGACTGCAACCTGTTGCCAAAGTTACACATAGTACAGGTGGTGTGTAAGAAGTACCGGGGAT
TCACCATCCCCGAGGCCCTTCCGGGGAGTGCATCGGTACTTGAGCAATGCCTACGCCCGGGAAGAATTGCTTCCA
CCTGTCCAGATGATGAGGAGATCGAGCTCGCCTATGAGCAAGTGGCAAGGCCCTCAAATAGCCCCCTCTGGGA
CTCCCTCAACCCCTCCATTTTCTCCACAAAGGCCCTGGTGGTTTCCACATTGCTACCCAAATGGACACACTCCAA
AATGGCCAGTGGGCAGGGAAATCCTGGAGCACTTGTCCGGGATGGTGTGGTGGAAGAGGGGATGAGGGAAAGAAA
TGGGGGGCCTGGGTCAGATTTTATTTGTGGGGTGGGTGAGTAGGACAACATATTTCAGTAATAAAATACAGAAT
AAAAATCAAGTGTTTTTAAAAAAA

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FIGURE 1970

MAEEQPQVELFVKAGSDGAKIGNCPFSQRLFMVLWLKGVTFNVTTVDTKRRRTETVQKLCPGGQLPFLLYGTEVHT
DTNKIEEFLEAVLCPPRYPKLAALNPESNTAGLDIFAKFSAYIKNSNPALNDNLEKGLLKALKVLDNYLTSPLE
EVDETSADEGVSRKFIDGNELTLADCNLLPKLHIVQVVCKYRGFTIPEAFRGVHRYLSNAYAREEFASTCPD
DEEIELAYEQVAKALK

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FIGURE 1971

ATGAGCAGCTCAGAGGAGGTGTCCTGGATTTCCTGGTTCTGTGGGCTCCGTGGCAATGAATTCTTCTGTGAAGTG
GATGAAGACTACATCCAGGACAAATTTAATCTTACTGGACTCAATGAGCAGGTCCTCACTACCGACAAGCTCTA
GACATGATCTTGGACCTGGAGCCTGATGAAGAACTGGAAGACAACCCCAACCAAGATGACCTGATTGAGCAGGCA
GCCGAGATGCTTTATGGATTGATCCACGCCCGCTACATCCTTACCAACCGTGGCATCGCCAGATGTGGAAAAG
TACCAGCAAGGAGACTTTGGTTACTGTCTCGTGIGTACTGTGAGAACCAGCCAATGCTTCCCATTGGCCTTTCA
GACATCCCAGGTGAAGCCATGGTGAAGCTCTACTGCCCAAGTGATGGATGTGTACACACCCAAGTCATCAAGA
CACCATCACACGGATGGCGCCTACTTCGGCACTGGTTTCCTTCACATGCTCTTCATGGTGCATCCCGAGTACCGG
CCCAAGAGACCTGCCAACCAGTTTGTGCCAGGCTCTACGGTTTCAAGATCCATGCGATGGCCTACCAGCTGCAG
CTCCAAGCCGCCAGCAACTTCAAGAGCCAGTCAAGACGATTTCGCTTGA

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FIGURE 1972

MSSEEVSWISWFCGLRGNEFFCEVDEDIQDKFNLTGLNEQVPHYRQALDMILDLEPDEELEDNPNQSDLIEQA
AEMLYGLIHARYILTNRGIAQMLEKYQQGDFGYCPRVYCENQPMPLIGLSDIPGEAMVKLYCPKCMDVYTPKSSR
HHHTDGAYFGTGFPHMLFMVHPEYRPRKRPANQFVPRLYGFKIHAMAYQLQLQAASNFKSPVKTIIR

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FIGURE 1973A

TAGTGCACGCACGACGGCGTAGTACGCTCCCCGGGCGACAGCGGTGGCGGCTCCTCGGGGTGCTCGGGTCCCT
CCCACCTAGGCCGGCCCGGCCGACTCGCCCTCAGAACTCACTGTTGGGGCTCGGGACTTTCTCGTCTGGCC
CCACAAAAGTAAGCTTGGGACCTGGGGGAGCGGGAAGTATCGCTTCGAGATCCCCAAATATCGGGGAAA
CGGAAGTGGCCGCTCGGTGGCAGGTTTGGGGAGACCGGAAGTGACGAGACCTGTGGCCATCGAGCCCTAATGATA
GTACCACTACCGCTGTGGAGAGCCGTGACAGCTTGGAGGTGTGGTGAAGACCTTGGACTCTCAAACCTCGTACCT
TTATTGTGGGGGCCAGATGAATGTAAGAGGTTTAAGGAGCAATTCGTGCTCTGTGAGCATCCCATCTGAAA
AACAACGGCTCATTTACAGGGACGAGTTCTGCAAGATGATAAGAAGCTTCAGGAATACAATGTTGGGGGAAAGG
TTATCCACCTGGTGGAAACGGGCTCCTCTCAGACTCACCTCCCTTCTGGGGCATCTTCTGGGACGGGCTTGCCT
CAGCCACTCATGTTGGGGATCCCCCCTGGTACTCGGGGGCTTGGGGCTCTGTTTATGACCGGAATGCCAACA
GCTATGTATGGTTGGAACCTTCAATCTTCTAGTGACGGCTCTGTCTGTGATGTTACATACAATGGAACAGG
CCCCGATTAGAGTGAAGCCGCGGTACGGCTGGTGTGATGGCTCAGCAGATATCAGGGATATACAGACCTTACTAT
CCCGGATGGAGACTTCCCTACCTTCACTGTGCGAGGAGGGCCCCAACCGCAGCAGCTCAGCCGCCCGCAGC
CAGCGGCTGTGACCCCGAGGACGAGTGCCTTGAGCTCTCAACATCAGAACCAAGTGAAGCACTCTCCCT
GGGAGCCCATGGAGGCAGAAAGTGGAGAGCGTGCCCCAGCCAGAACCCGGAGCTCACTCTGGCCAGCCCC
CAGCGGGCCCAACACCTGCCCGGAACAAATGCACCAACCATCTTCCCTGCGAGTATGTGAGGTGCTCC
AGGAGCTACAGCGGCTGGAGAGTGCCTCCAGCCCTTCTGAGCGCTATCAGAGGTTCTGGGTGCTGTGCCA
CCACGGACTACAATAACAATACAGAGGGGCGGGAGGAGATCAGCGGTGATCAACTTGGTGGGAGAGGCTTCG
GACTGCTGGGCAACACCTTTGTGCACTGTCTGACCTGCGCTGCAATCTGGCCTGCACGCCCCACGACCTGC
ATGTGGTCTGGGCTATGTCTCTACACACACCCCAATGGTGTCTCAGCAGGACGCAATCCCATACAGATCAATG
TGGGAACCACTGTGACCATGACAGGAAATGGGACTCGGCCCGCCCAACTCCCAATGACAGGACCACTCCCCCTG
GTCTTGGGAGGGCTCATCCGTGGCTCCGCTTCTTACCAATGTGAGTCTCACTGAGGGGCTCCCCCGCAG
GTCCAGGCTCCCCCGCAGCCACAGCCACCGAGGTCATCCGGATTTCACACAGAGTGTGGAACCCGTGGTCA
TGATGCACATGAACATTCAAGATTCTGGCACACAGCCTGTGGTGTTCGAGTGTCCCACTGGCCCCCTGGGAC
CCCTGGTGTATGGCCAAACCTTGGGACAGCAGGTGCGAGGCTTCCCAACAGCTCCAAACCGGGTGTGATTGCC
GGCCCACTCTCCACAGGCTCGGCCCTCCCATCTCGGAGGGCCCCAGTCTCTGGGACACTGCAAGGCGCGGCT
TGGGTACCAATGCCCTGTTGGCCAGATGGTAGCGGCTTGTGGGGCAGCTTCTATGACGACGCTCTTGTGG
CTCAGGGGACCCAGGTATGGCTCCACCGCAGCCCTGCCACTGCTTCTGCCAGTGTGCGACCAACACAG
CTACCAACAGTGGCCCCGCTCCTGGGGGCTCGCCAGCCTCCACCCACCCTCAACCCCTCATGGCTGATCTTC
AGTCTCTCAGCTTCTGGGGAACCTGCTAGGGCTTGCAGGGCCAGGGGCTGGAGGGCGGTGTGGCTTCCCA
CCATCACTGTGGCGATGCTTGTGCTTCTTCCCAAGGATGACTGACTTCTTGCAGGCAACACAGACAG
CCCCCTCAACACCCCACTCTCCACCCCCACCCTCGCCACAGCAGCAGCACTGCCCCCACCAGGCTCCC
CTTCTGTGGCGCAGGGAGCTCTGGAGGCTGGGTTGTGAGAGCTGTACCGGAGTTTTTACCTCAGTGGTGC
AGGGTGTGCTCAGTCTCTGTGGGCTCCTTGGGGCTCGGGCTGGCAGCAGTGAAGATTGTGCTCTCATAC
AACGCCCTCAGTGGATCCAGCAACATCTTTGAGCCTGGAGCTGATGGGGCTGTGATTCTTTGGGCTTGGCTT
CTCTTCTGTGCCAGAACTTCTATGTTGGAGCTAGTGTGCTTCCATGGGCAATTCAGGCCACTACAACGGC
TCCAGCCCCAGCTGCGATCTTCTTCCACAGCACTACCTGGTGGTGGTGGAGGCCCCACCCAGTCAACCTCGGA
TGGCAACCCACAGTATGATCAGCGGGGCTAGAAGAGTATGTGCGGGAGAGTTTTTCTTGGTGGCAGTTAGCCAG
GTGTGGACATCATCCGGACAAACCTGGAATTTCTCCAAGGAGTTAATAGCAATGTGCGCATGTGTGATCT
GCACAGATAGTGGATTGGGGGCCGCTGCTGGAGTTGTGAACCAAGGCTGTTTGAATGCCTGGCCCTGAAC
TGCACTGCTTGGGGGACAGGAGTGGAGCTTGTGCTGTTATCAATGGCCGAATTCTGCTGATGTCTGTGGGG
TGAATCTCTCTTGGTGGCTGGCTGACCACTATGATGGGACTGAGGCTTCAGGTTGGTACTGGAGCACA TGCTG
TAGGCCCTGATGGCAATCTCAGATAGCTTCGAGGGTGGTGTATCCCCCAGCCACTTCTGTAGGAGCAATGG
AAGTTACAGGAGCAGAAAGAGCTTCCCTGAGCCTCAGCGGGAATGCTTCCCGAGCCCCGGAACACAGCAG
AAGAGGCCATGTCCGAGGTTCCAGCTCTGCTCTTGGGGGGCTCCCGGATGAACAGGATGAGGCTTCAGCT
AGACAGAACTTGGGACGCTGACCTGCCCCCAGAATGGGTCCTTATTCACAGCAGGACATTCAGAGCGAGCGGA
AGGTGAACCCGACGCCCTCTGAGTGATGCTACCTCAGTGGTATGCTGCGCAGAGACGCAAGCAGTGCAGG
GTAGGGGCCCGGACGTGCTTCTCTCAGAGGCTGTGAGCGGGGCTTAAGGACGGAGCTCGGCCCTGACGA
GCCCGAGAGCCTGAGCGGGACCTGGAGGCACCAAGGTTCAAGGAGAGCTACAGGCAGCAGCTCCGGCTGTGATA

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FIGURE 1973B

TACAAAAACGACTGCAGGAAGACCCCAACTACAGTCCCAGCGCTTCCCCAATGCCAGCGGGCCTTTGCTGATG
ATCCTTAGCTCTTTGCTCTATGGCCCTTCCTCATCAGGGGACCGTTCCCCCTCTTCTTCACAGTATTTAAGA
AATAAAAGTCGGATTTTCTGGC

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FIGURE 1974

MEPNQSTSTAVEEPPDSLEVLVKLTDSQTRTFIVGAQMNVKEFKEHIAASVSIPSEKQRLIYQGRVLQDDKKLQEX
NVGGKVIHLVERAPPQTHLPSGASSGTGSASATHGGGSPPGTRGPASVHNRNANSYVMVGTFNLPDGSADVH
INMEQAPIQSEPRVRLVMAQHMIRDIQTLLSRMETLPLYLCRRGGPQPQHSQPPPPPPAVTPEFVALSSQTSEPV
SEAPPREPMEAEVEERAPAQNP ELTPGPAPAGTTPAPETNAPNHPSPA EYVEVLQELQRLESRLQPFLLQRYEY
LGAAATTDYNNNHGREEDQRLINLVGESLRLLGNTFFVALSDLRCNLACTPPRHLHVVRPM SHYTTPMVLQQA
PIQINVGTTVTMTGNGTRPPPTPNAEAPPPGGQASSVAPSSTNVESAEGAPPPGPAPPPATSHPRVIRISHQS
VEPVMMHMNIQDSGTQPGVPSAPTGPLPGPHGQTLGQQVPGFPTAPTRVVIARPTPPQARP SHPGGPPVSGT
LQAGAGLTNASLAQMVSGLVGQLMQPVLVAQGTIPGMAPPAPATASASAGITNTATTAGPAPGGPAQPPPTPQP
SMADLQFSQLLGNLLGPAGPGAGGPGVASPTITVAMPGVPAFLQGMTDFLQATQTAPPPPPPPPPPPAPEQQTM
PPPGSPSGGAGSPGGLGLESLSP EFFT SVVQGVLSLLGSLGARAGSSESIAAFIQRLSGSSNIFEPGADGALGF
FGALLSLLCQNFMSVDVVMLLHGHFQPLQRLQPLRSFFHQHYLGGQETPTSNIRMATHTLITGLEEYVRESFSL
VQVQPGVDIIRTNLEFLQE QFN SIAAHLVHCTDSGFGARLLELCNQGLFECLALNLHCLGGQOMELAAVINGRIR
RMSRGVNP SLVSWLTMMGLRLQVLEHMPVGPDAILRYVRRVGDPPQLPEEPMEVQGAERASPEPQRENASPA
PGTTAEAMSRGPPPAPEGGSRDEQDGASAETEPWAAAVPEWVPIIQDQIQSRKVKPPPLSDAYLSGMPAKR
RKTMQEGEQLLLEAVSRAAKAAGARPLTSPESLSRDLAEPEVQESYRQQLRSDIQRLQEDPNYSPQRFPNQA
RAFADDP

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FIGURE 1975A

TAGTGCACGCACGACGCGGTAGTACGGTCCCCGGGCGACAGCGGTGGCGGCTCCTCGGGGTGCTCGGCTCCCT
CCCACCTTAGCGGCCCGCCGCGGAGCTCGCCCTCAGAACTCACTGTTGGGGGCTCGGGACTTCTCGTCGTGCCC
CCACAAAAGTAAAGCTTTGGGACCTGGGGGAGCGGAAGTATCGCTTCGAGATCTCCCAAATACATCTGGGGAAA
CGGAAGTGGCCGTGGTGGCAGGTTTGGGGGAGACCAGGAAGTACGAGACCTGTCGGCCATGGAGCCTTAATGATA
GTACCACTACCGCTGTGGAGGAGCCTGACAGCTTGGAGGTGTTGGTGAAGACCTTGGACTCTCAAACCTGTACCT
TTATTGGGGGCGCAGATGAATGATAAAGAGTTTAAAGGAGCACAATTGCTGCTCTGTGAGCATCCCAATCTGAAA
AACAACGGCTCATTTACCAGGGACGAGTCTGCAAGATGATAAGAAGCTTCAGGAATACAATGTTGGGGGAAAGG
TTATCCACCTGGTGAACGGGCTCCTCCTCAGACTCACTCCCTTCTGGGCGACTTCTTGGGACGGGCTGTGCCT
CAGCCACTCATGGTGGGGGATCCCCCTGGTACTCGGGGGCTGGGGCTCTGTTCATGACCGAATGCCAACA
GCTATGTCTATGGTGGAACTTCAATCTTCTAGTGACGGCTGTGCTGTGGATGTTACATACAATGGAACAGG
CCCCGATTAGAGTGAGCCCGGGGTACGGCTGGTGATGGCTCAGCAGATGATCAGGGATATACAGACCTTACTAT
CCCCGATGGAGTGTGCGAGGAGGGCCCCAACCGCAGCAGCTCAGCGCCCCCGCAGCCACCGGCTGTGACCCGG
AGCCAGTAGCCTTGAGCTCTCAAACATCAGAAACAGTTGAAAGTGAAGCACTCCCCGGGAGCCATGGAGGCGAG
AAGAAGTGGAGGAGCGTGCCCCAGCCAGAACCCGGAGCTCACTCTGGCCAGCCCCAGCGGGCCCAACACCTG
CCCCGGAACAAATGCACCAACCACTCTTCCCCCTCGCGAGTATGTGAGGTGCTTCAGGAGTACAGCGGCTGG
AGAGTCGCCCTCAGCCCTTCTTGACGCGCTACTACGAGTTCTGGGTGCTCTGCCACACCGGACTACAATAACA
ATCACGAGGGCGGGGAGGAGTACGCGGTTGATCAACTTGGTAGGGGAGAGCCTGCGACTGCTGGGCAACACCT
TTGTTGCACTGTCTGACCTGCGCTGCAATCTGGGCTGACGCGCCCCACGACACCTGCATGTGCTCGCCCTATGT
CTCAGTACACCCACCCCATGGTCTCCAGCAGGCGAGCATTCCCATACAGATCAATGTGGGAACCACTGTGACCA
TGACAGGAAATGGAGCTCGGCCCCCCCAACTCCCAATGCAGAGGCACTTCCCCCTGGTCTGGGACGGCTCAT
CCGTGGCTCCGTCTTCAACAAATGTGAGTCTCAGCTGAGGGGCTCCCCCGCAGGCTCCAGCTCCCCGGCAG
CCACAGCCACCCGAGGGTCATCCGGAATTTCCACCAAGAGTGTGGAACCCGTGGTTCATGATGCATGAACATT
AAGATTCTGGCAGCAGCCTGGTGGTGTCCGAGTGTCTCCACTGGCCCCCTGGGACCCCTGGTCTGATGGCCAAA
CCCTGGGACAGAGGTGCCAGGCTTCCCAACAGCTTCAACCCGGGTGGTGATTGCCCGGCCACTCTCCCAAGG
CTCGGCCCTTCCATCTCGAGGGCCCCAGTCTCTGGGACACTGCAGGGCGCGGTGTGGGTACCAATGCCTCGT
TGGCCCCAGATGGTGAGCGGCCCTTGTGGGCGAGCTTCTTATGACGCCAGTCTTGTGGCTCAGGGGACCCAGGTA
TGGCTCCACCGCCAGCCCTGCCACTGTCTTGTCCAGTGCTGGCACCAACACAGCTACCCAGCTGGCCCCG
CTCTCTGGGGGCTGCCAGCCTCCACCCACCCCTCAACCCCTCATGGCTGATCTTCACTTCTCAGCTCTCTGG
GGAACCTGCTAGGGCTCGAGGGCCAGGGGCTGGAGGGTCTGGTGGCTTCTCCACCATCACTGTGGCGATGC
CTGTGTCTCTGCGCTTTCTCAAGGCATGACTGACTTCTTGACAGCAACACAGACAGCCCTCCACGCCCCCA
CTCCTCAACCCCAACCACTGGCCCCAGAGCAGCAGCACTGCCCCACACAGCTCCCTCTTGGTGGCGAGGGA
GTCTTGAGGCGCTGGGTCTTGAGAGGCTGTGAGAGGCTTACCTGAGTGGTGCAGGGTGTGCTCAGCTCCC
TGCTGGGCTCCCTGGGGGCTCGGGCTGGCAGCAGTGAAGTATTGCTGCTTATACAAAGCCTCAGTGGATCCA
GCAACATCTTTGAGCTGGAGCTGATGGGCGCTTGGATTCTTTGGGGGCTTGTCTTCTCTGTGCCAGATGC
TCTCTATGGTGGACGTAGTATGCTTCTCCATGGGCATTTCAGCCACTACAACGGCTCAGGCCACAGCTGCGAT
CCTTCTTCCACAGCACTACCTGGGTGGTCAGGAGCCCAACCCAGTAACATCCGGATGGCAACCCACATTTGA
TCAGGGGCTAGAAGATATGTGCGGAGAGTTTTTCTTGGTGAGGTTACAGGCTCAGGAGTGGGACATCATCCGA
CAAACCTGGAATTTCTCAAGAGCAGTTTAATAGCATTGCTGCGCATGTGCTGCATTGCACAGATAGTGGATTG
GGGCCGGTGTCTGGAGTTGTGAACAAGGCTGTTTGAATGCTGGCCCTAACCTCAGCTGAGACAGTGTGGGCGAG
AGCAGATGGAGCTTGTGCTGTTATCAATGGCCGAATTCGTGATGTCTCTGTTGGGTGAATCCCTCCTTGGTGA
GCTGGCTGACCATATGATGGGACTGAGGCTTCAGGTGGTACTGGAGCAGATGCCTGTAGGCCATGATGCCATT
TCAGATACGTTTCGACGGGTTGGTGATCCCCCCCCAGCCACTTCTGAGGAGCCAAATGGAGTTCCAGGAGCAAAA
GAGCTTCCCCCTGAGCCTCAGCGGAGGAATGCTTCCCCAGCCCTGGAACAACAGCAGAGAAGGCCATGTCCCCGAG
GTCCACCTCTCTGCTCTGAGGGGGCTCCCCGGATGAACAGGATGGAGTTCAGCTGAGACAGAACCTTGGGCGAG
CTGCACTCCCCCAGAAATGGGTCCTATTATCCAGCAGGACATTGAGGCCAGCGGAAGGTGAACCCGACGCCCC
CTCTGAGTGATGCTTCACTCAGTGGTATGCTGCCAAGAGAGCGCAAGCAATGCAGGTTGAGGGCCCCCAGCTGC
TCTCTCAGAGGCTGTGAGCCGGGACGCTAAGGACGCCGGAGCTCGGCCCTGAGCGCCCCGAGGCGTACGCG
GGGACCTGGAGGCACCAAGGTTTACAGGAGGCTACAGGCAGCAGCTCGGCTGTGATATACAAAACGACTGCAGG

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FIGURE 1975B

AAGACCCCAACTACAGTCCCCAGCGCTTCCCAATGCCAGCGGGCCTTGTGATGATCCTTAGCTCTTTGCTC
TATGGCCCTTCCTCATCAGGGGACCGTTCCCCCTCTTCCTTCACAGTATTTAAGAAATAAAAGTCGGATTTT
CTGGC

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FIGURE 1976

MEPNDSSTAVEEPDSLEVLVKTLSQTRTFIVGAQMNVKEFKEHIAASVSIPSEKQRLIYQGRVLQDDKKLQEY
NVGGKVIHLVERAPPQTHLP SGASSGTGSASATHGGGSPPGTRGPGASVHDRNANSYVMVGTFNLP SDGSAVDVH
INMEQAPIQSEPRVRLVMAQHMI RDIQTLLSRMECRGGPQPQHSQFPFPQPPAVTPEFVALSSQTSEPVSEAPPR
EPMEAEVEEERAPAQNFELTPGPAPAGTTPAPETNAPNHPSPA EYVEVLQELQRLESRLQPFLO RRYEVLGAAAT
TDYNNNHGREEDQRLINLVGESLRL LGNTFVALSDLRCNLACTPPRHLHVVRPM SHYITPMVLQQAIP IQIN V
GTTVTMTGNIRPPPTFNAEAPPPGPGQASSVAPSSSTNVESAE GAPPGPAPPPATSHPRVIRISHQSV EPPVVM
MHMNIQDSGTQPGGVP SAPTGPLGPPGHGQTLGQQVPGFP TAPTRVVIARPTPPQARP SHPGGPPVSGTLQ GAGL
GTNASLAQMVSGLVGQLLMQFVLVAQGTGPMAPPPAPATASASAGTTNTATTAGPAPGGPAQPPFTPQP SMADLQ
FSQLLGNLLGPAGPGAGGSGVASPTITVAMPGVPAFLQGMDTDFLQATQTAPPPPPPPPPPPAPEQQTMPFP GSP
SGGAGSPGGLGLESLSPEFFT SVVQGVLSLLGSLGARAGSS EIAAFIQRLSGSSNIFEPGADGALGFFGALLS
LLCQNFMSVDVVMLLHGHFQPLQRLQPQLRSFFHQHYLGQEP TPSNIRMATHLITGLEEYVRESFSLVQVQPG
VDIIRTNLEFLQEQFNSIAAHVLHCTDSGFGARLLELCNQGLFECLALNLHCLGQQQME LAAVINGRIRMRSGV
NPSLVSWLTTMMGLRLQVVLHMPVGPDAILRYVRRVGDPPQP LPEEPM EVQGAERASPEPQRENASPA P GTTAE
EAMSRGPPPAPEGGSRDEQDGASAE TPWAAAVPPEWVPIIQDDIQSQRKV KQPFPLSDAYLSGMPAKRRKTMQ
EGPQLLLSEAVSRAAKAGARLTPSPESL RDL EAPVQESYRQQLRSDIQKRLQEDFNYSFQRFPPNAQRAFADD
P

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FIGURE 1977A

TAGTGCACGCACGACGGCTAGTACGGTCCCCGGGCGACAGCGGTGGCGGCTCCTCGGGGTGCTCGGCTCCCT
CCCACCTTAGGCCGGCCCGGCCCGACTCGCCCTCAGAACTCACTGTTTGGGGCTCGGGACTTTCTCGTCGTGCC
CCACAAAAGTAAAGCTTGGGCACTTGGGGAGCGGGAAGTATCGCTTCGAGATCCCCAAATACCTTACCGGGAAA
CGGAAGTGGCCGTTCGGTGGCAGAGACCTGTGGCCATGGAGCCTAATGATAGTACCAGTACCGCTGTGGAGGAGC
CTGACAGCTTGGAGGTGTTGGTGAAGACCTTGGACTCTCAAACCTCGTACCTTTATTGTGGGGGCCAGATGAATG
TAAAGAGTTTAAAGGAGCAGATTTGCTGCTCTGTGACAGTCCCATCTGAAACACACCGGCTCATTACAGGGAC
GAGTTCTGCAAGATGATAAGAGCTTCAGGAATACAATGTTGGGGGAAAGGTTATCCACCTGGTGGAAACGGGCTC
CTCCTCAGACTCACTCCCTTCTGGGGCATCTTCTGGGACGGGTCTGCCTCAGCCACTCATGTTGGGGGATCCC
CCCCCTGGTACTCGGGGGCTGGGGCTCTGTTTCATGACCGGAATGCCAACAGCTATGTCATGGTTGGAACCTTCA
ATCTTCTAGTGACGGCTCTGCTGTGGATGTTACATCAACATGGAACAGGCCCCGATTAGAGTGAGCCCCGGG
TACGGCTGGTGATGGCTCAGCAGATGATCAGGGATATACAGACCTTACTATCCCGGATGGAGTGTGCGAGGAGGC
CCCCACCGCAGCAGTCACTGACGCGCCCCGACGCGCTGTGACCCCGAGCCAGTACGCTTGAAGTCTCAAA
CATCAGAACAGTGTAAAGTGAAGCACTTCCCCGGGAGCCATGGAGGCAGAAAGTGGAGAGGAGGATC
CCAGAACCCGGAGCTCACTCTTGGCCACGCCAGCGGGCCCAACACTTGGCCCGGAAACAAATGCACCAACC
ATCCTTCCCCTGCGGAGTATGTCGAGGTGCTCCAGGAGCTACAGCGCTGGAGAGTCGCTCCAGCCCTTCTTTCG
AGCGCTACTCAGAGTTCTGGGTGCTGCTGCCACCGGACTACAATAACAGTACAGGGCCGGGAGGAGATC
TCCAGCAGGACGCCATTCCCATCAGATCAATGTGGGAACCACTGTGACCATGACAGAAATGGGACTCGGCCCC
CCCCAACTCCCAATGCAGAGCAGCTTCCCCCTGGTCTGGGCGAGGCTCATCCGTGGCTCCGCTTCTTACCAATG
TCGAGTCTCAGCTGAGGGGGCTCCCCGCCAGGTCCAGCTCCCCGCCAGCCAGCCAGCCAGGAGTCAATCC
GGATTTCACCAAGAGTGTGGAACCCGTGGTCATGATGCACATGAACATTCAAGATTCTGGCACACAGCTTGGT
GTGTTCCGAGTGCTCCACTGGCCCCCTGGGACCCCCCTGGTCATGGCCAAACCTTGGGACAGCAGGTGCCAGGT
TCCCAACAGCTCCAACCCGGGTGGTGATTGCCCGGCCACTCTCCACAGGCTCGGCTTCCCATCTTGGAGGGC
CCCCAGTCTCTGGGACACTGCAGGGCGCGGCTTGGGTACCAATGCTCGTTGGCCAGATGGTAGCGGGCTTG
TGGGGCAGCTTCTTATGAGCCAGTCTTGTGGTTCAGGGGACCCAGGTATGGCTCCACGCCAGCCCTTGCCA
CTGCTTCTGCCAGTCTGGCACCAACCAACAGCTACCAAGCTGGCCCGCTCTGGGGGGCTTGGCCAGCCTC
CACCCACCCCTCAACCTCCATGGCTGATCTTCAGTTCTCTCAGCTTCTGGGGAACCTGCTAGGGCCTGACGGGC
CAGGGCTCGAGGGTCTGGTGTGGCTTCTCCACCACTCACTGTGGCGATCGCTGGTGTCCCTGCTTCTTCCAG
GCATGACTGACTTCTTGACGGCAACACAGACAGCCCTCCACCCACCCAGCTCTCCACCCCAACCACTTGGCC
CAGACGACGACCATGCCCCCAACAGGCTCCCCCTTGGTGGCGCAGGAGTCTCTGGAGGCTGGGTCTTGAGA
GGCTGTACCGGGATTTTTTACTTCAGTGGTGACGGGTGTGCTCAGCTCCTGCTGGGCTCCCTGGGGGCTGGG
CTGGCAGCAGTGAAGATATTGCTGCCCTCATACAAGCCTCAGTGGATCAGCAACATCTTTGAGCCTGGAGCTG
ATGGGGCCCTTGGATTCTTTGGGGCTTGTCTTCTCTGTGCCAGAAGTCTCTATGGTGGGACGTAGTGTGATG
TTCTCCATGGGCATTTCCAGCCACTACAACGGCTCCAGCCCCAGCTCGCATCTCTTCCACAGCACTACTCTG
GTGTCAGGAGGCCACACCAAGTAACATCCGATGGCAACCCACACATGATCAGGGGCTAGAAGATATGTGG
GGGAGATTTTTCTTGGTGAGGTTTCAGCCAGGTGTGGACATATCCGAGCAAACTTCCCTGAGCTCAGCGGG
AGTTTAAATAGCATGCTGCGCATGTGTCGATTCGACAGATAGTGGATTGGGGCCGGTGTGCTGAGTTGTGTA
ACCAAGGCCTGTTTGAATGCTGGCCCTAAACCTGCACTGCTTGGGGGACAGCAGTGGAGCTTGTGCTGTTA
TCAATGGCCGAATTCGTGSTATGTCTGTTGGGGTGAATCCCTCCTTGGTGAGCTGGCTGACCACTATGATGGGAC
TGAGGCTTCAGGTGGTACTGGAGACATGCTGTAGGCCCTGATGCCATTCTCAGATACGTTCCGAGGGTGGTG
ATCCCCCGGACCACTTCTCAGAGGCCAATGGAAGTTCAGGGAGCAGAAAGCTTCCCTGAGCTCAGCGGG
AGAATGCTTCCCCAGCCCTGGAAACACAGCAGAGAAGGGCATTGTCAGGCTCACCTCTGCTCCTGAGGGG
GCTCCGGGATGAACAGGATGGAGCTTCACTGAGACAGAACTTGGGACGCTGCAATCCCCCAAGATGGGTCC
CTATTATCCAGCAGGACATTCAAGAGCCGCGGAAGGTGAACCCGAGCCCCCTCTGAGTGTGCTTACCTCAGT
GTATGCTCTGCCAAGCAGCGCAAGACGATGACGGGTGAGGGCCCCAGCTGCTTCTCAGAGGCTGTGAGCGGG
GACGTAAGGCACCGAGCTCGGCCCTGACGAGCCCGAGGCTGAGCGGGACTGTGAGGCGACCAAGGTTTC
AGGAGAGCTACAGGCAGCAGCTCGGTCTGATATACAAAACGACTGCAGGAAGACCCCACTACAGTCCCCAGC

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FIGURE 1977B

GCTTCCCAATGCCAGCGGGCCTTTGCTGATGATCCTTAGCTCTTTTGCTCTATGGCCCTTCCTCATCAGGGGAC
CGTTTCCCCCTCTTCCTTCACAGTATTTAAGAAATAAAAGTCGGATTTTCTGGCAAAAAAAAAAAAAAAAAAAAA
AAAA

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FIGURE 1978

MEFNDSTSTAVEEPDSLEVLVKLTDSQTRTFIVGAQMNVEKFEKEHIAASVSIPSEKQRLIYQGRVLQDDKKLQEY
NVGGKVIHLVERAPPQTHLPSGASSGTGSASATHGGGSPFGTRGPASVHDRNANSYVMVGTFNLPSDGSVVDVH
INMEQAPIQSEPRVRLVMAQHMIRD IQTLLSRMECRGGPQPHSQPPFPQPAVTPEPVALSSQTSEPVSEAPPR
EPMEAEVEERAPAQNPETPGPAPAGPTPAPETNAPNHPSPA EYVEVLQELQRLERLQPF LQRY YEVLGAAAT
TDYNNHHEGREEDQRLINLVGESLRLGNTFVALSDLRCLACTPPRHLHVVRPMSHYTTFPMVLQQAAP I QIN V
GTTVTMTGNGTRPPPTPNÆAPP GPQGASSVAPSSINVESAE GAPP GPAPPPATSHPRVIRISHQSV EPVVM
MHMNIQDSGTQPGGVP S APTG PLGPPGHGQTLGQQVP GFPTAPTRVVIARPTPPQARPSHPGGPPVSGTLQGAGL
GTNASLAQMVSGLVGQQLMQPVLAQGTGPMAPP P APATASASAGTTNTATTAGPAGGPAQPPPTPQPSMADLQ
FSQLLGNLLGPAGPAGGSGVASPTITVAMPGVPAFLQGMDTDFLQATQTAPPPPPPPPPPPPPAPEQTMPPPGSF
SGGAGSPGGLGLESLSPEFFTSVVQGVLSLLGSLGARAGSS EIAAF IQR LSGSSNIFEPGADGALGFFGALLS
LLCQNF SMVDVVMLLHGHPQLRQLPQLRSFFHQHYLGGQEP T P SNIRMATHTLI TGLEEYVRESFSLVQVQPG
VDIIRINLEFLQE QFN SIAAHVLHCTDSGFGARLLELCNQGLFECLALNLHCLGGQOMELAAVINGRIIRMSRGV
NPSLSVSWLTMMGLRLQVVLEHMPVGPDAILRYVRRVGDPPQPLPEEPMEVQGAERASPEPQRENASAPGTTAE
EAMSRGPPPAPEGGSRDEQDGASAE TEPWAAAVPEWVP I IQQDIQSQRKV KPPPLSDAYLSGMPAKRRKTMQG
EGPQLLLEAVSRAAKAGARPLTSPESL SRDLEA EVQESYRQQLRSDIQKRLQEDPNYSQPRFPNAQRAFADD
P

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FIGURE 1979A

CCCTAGGCCCGGGTCCCGGATCCCCGCGCACCCGGCCAGGCTCTGGCAGCTTTTGGGGGAGGTGCCTGCAGGACC
CAACATACTCAATGAGCTTCCAGCGCAATGTCGATCGCTCGGGGCGGACTGCCAAGGGAAGGATGGAAGAAGAA
TATTCCTCGCTCAACCTGTTTGTATACGTATAAGGGAAAGTCTTAGAGATCCGAACCCGCTGTGCCCTCGC
CATGGCCTGCAGAGTCTCGGGAAGTTGCCATTGCCGGGCTATGCCAGCTCCAGCCAACTCTTCCAAAGCCTGAAA
GCCAGAGAACAAAGGCAATGACCCCAATGTCTCACTAGTGCCAAAAGACGGAAACAGGATGGGCAAGCAAAACAGGAG
CAGTCCGACCCCAAGAGTTCGAGTGCCTCAACCGCTCAGCCCGCGAATCGCAGCCACTGCCGCGTTTCACAGACG
CCTGCCTCCAACAGCCGAAACGACCCCGCAGCAGCCCGGAAGAACTCTTTGGTTCCAAAGCGGGGTAAAGTCC
TGGGCAACAGCCAGCTCACCATGGAGCACATGGAGATGGTGAAGGGCATCAAGCCTACTGTCAAGATTCTCT
CGAGAGGAATTTCCGACCCCTGCAGCGGCTGGCGACAGGACAAGGCTGCCAAGGAAGGGAGTCTGCCGAACAG
TCGTCTGGGCCCGGACCAAGCCTCCGCCCCCAAAATTTCTACAATTTGAGGGACGGAGGTGGCGTGGCCCTGAT
GAGCTGGAGGGGCCGAGATCCAAACTTCATCATGGTCATGATCCCGGGGTGGGCTACAGCCTTCAGGCCCAACC
CAGTTCCCTCCCTACCGCGGAATGATGCCGCTTTTCATGTATCCCCCATATCTCCCGTTCCCTCCGCCCTATGGA
CCCCAGGGGCTTACCAGTACCCCACTCTCTGATGGGCCAGCCGTTTCCCGGTGTGGCGGGCCCCCGAGGCTCA
GGGCCACCAATGCGCTTAGTAGAGCCTGTGGGTCTGCTCCCTTATTCTCAAAGAGGATAATCTCAAAGAGTTTGAT
CAGTTGGATCAGGAGAATGATGATGGTTGGGCAGGGGCCATGAAGAGGTTGACTACACTGAAAGCCTCAAGTTC
AGCGATGAGGAAGATGGCGAGACTCTGATGAGGAGGGAGCTGAGGGCCACAGGAGTCCCAATCAGCTCTCTGT
GAGGAACGGCCCTCCCTGAAGCAGATGGCAAAAAGGGCAACTCCCAACAGCGCAACCGCCCACTCTTAAGAGAGGCC
TGGGCAAGAACTCTCGGCCCTCCAGAGACAGAGCCGGGACCTCTGCCCCAAAGCCTCCCTACCCCTCGGGGAC
TACCAGATCTGGGGGCTCTCCCTCGAAGCCGCCAGCACTGAAGATGAGGATGAGGATGAGGCGGACAGCA
AAGCAGTCGTATCTAGATTTCCTGGCAGTGAGCGGGCCCGGCGACGGCGAGAGAAGAGGAGCGGCGCATG
CAAGAAGAGCGCGGGCGAGCCTGTGCTGAGAAGCTCAAGCGACTCGATGAAAGTTTGGGGCACCTGACAAGCGG
CTCAAAGCAGAGCCTCTGCCGCCACTGCTGCCCTTTACCCCACTGCCACCTCGCAGTCCCTAAAGAACTC
CTGCGACTCCAGCTCCACTCCAGCATCAGCCCCAACACAGAGAAGAACTGAAAGAGCAGCAGCAGGCCCT
CTGCCCAATCTACTCCTACTCTACTCTGCGCTGCGGCTCCCACTCTGGTGAAGTGGTGGTGCATGACGATAGC
ACCAGCAGTGGCAGCTTCGAAGCCAGCCAGTGAACCACTGCCCTCAAAGAGGGTCTGAACCACAGAA
GAGGTTCTCTCTTACCACACCCCCAGTTCCAAAGGTGGAACCCAAAGGGTGATGGGATTGGTCCCAACCCGCCAG
CCCCCTAGTCAGGGCTTGGGCTACCCCAATATCAGAAGTCGTGTGCTTCCTGTTTCCAGCGGCGAGCAGGAG
CAGCTCCTGAAGCAGCAGCAGCACCAGTGGCAGCAGCATCAACAGGGCTCTGCCCTCTTACCCACAGTGCCC
CCA TCACCACACAGCTGTAGCCTGGGGGCTGTGCCAGCTCCACAGGCTCCACCCGCCGCCCAAGCGCCCTG
TACCAGGTGCTCTGGGGCGGCCCCACCATGCCCCCAATGAATTTGATCCCGGATGATGATGATCTCTCCT
TATGTGACCCCGGCTCTCCAGGGTCTGCTCCCTCTAGACTTCTACCTCTCTGGTGTGATCTCTCTGCTCTA
TTTCCCGAGAGCGTTCAGCAGTGGGGGCTCAAGCTCAGAGCAATTTGACCTGATGACACTGTCTATGTTAGG
GAACGGGGCACTCCACCGGTGGATCCAAAGTTGGCTGGGTAGGAGATGTCTTACCGGCCACACCCGCTGAACCC
CGCCCACTTACCTCACTCTGCGCCAGGCTGCGGATGAGGATGACAAGGGGATGAGGAGCGAGACTCTCCAGTA
CTCTCCCAACCACTTCTGCGGCAATTCAGAGGCTTTCTGAGAATGGAGGCCCTGGGCGCCCAATCTCTGCG
TTTCTCTGAGGAACACAGGGGCCGCTCCACTCCCTGGCCCCAGGCACTGATGAAGTGGCCAAGATACAAACT
CCACCACCCAAAGAGGCGCCCTTAAGGAGGAGACTGCACAGCTGACGGGCGAGAAGCAGGCGCAAGAGCTGCC
CGCGGAGTCTGGGAGTGGAGGCCAGGGGCCCCCAACCAACCGCAGAGAGAGTCGCAACAGAGACCCGCTGGGGCCCT
CGTCCAGGGGACAGTCTGTGGAATCCCTCCAGAGGAGCCAGGGGCCCAACCCCGCGGGCTGGGCCCTATAAAG
AAACTCCACCACTCAAAAAGTAGAAGAGCTGCCTCCCAAGCCCTCGACAAGGGGAGTAGAAGCCCTAAACCC
CAAAGGCCACACCACTCAAGATAAACCAAGGGGAAGCTAGGGGGGCCCAAGGAGACCCCAATGGAATCTT
TCCCTCGCCCAAGGGCTTCGGAGGGAATACTTGCTATGAAGAAGTGGCTACCTCTTTGGGGGTGGGGCGGA
GGCGAGTATTTTCCAGAGGGAGGGGTTTTTGGGGGACCTATGGGGGACGAGGGCGGGGAGCCGAAGCCGGGAA
TTCCGAGTTTACCGAGGTTTTCAGGAGATGATGGGCGTGGAGGTGGGACAGGGGAGACCAACACCTCTCTGCT
CCCGAGGGCGCACTGCGCAGCAGACAAGGAGCGAGGTTTCAGAGTATGAGGAATCCCAAGCGGCGCGGAGCAG
CGGGGCTCAGAACAAGCAGCAGCAGCATGAGAGTGATCTGGCTCTTCAGACAAGGAGGCTCCCAACCCCAAG
GAGGAACTACTCAACGGTCCCTCTCGCTCCCCCAACCAAGCAACCCCTTACAGAGCCCAACCGGCTTC
ACTGCCCGGGGTGGCGAGTCTTCACTCCCAAGAGGGTGCCATCTCGCGGGGCCAGGAGGAGGAGGCCCTTC

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FIGURE 1979B

CCTCAAGTTTGCCCAAGGCTGGAGCCCTCAGCCAAAGTCTCTGGCTCCCAAGAAACCTCCACAGGCCCTTTGCCA
CCAAGTAAGAGGAGCTTTGAAAGAGAAGTTGATCCACAGGGCCCTCTGTCCCTGTGGCGCCGCGAGGCGAGCAATGGA
GGTAGCAATGTGGGCATGGAAGATGGGGAGCGACCCCGAAGGAGCGACATGGGAGGCTCAGCAGCAGGATAAA
CCGCGCTCGTTTCCGGAGGCTGAAGCAGGAACGGGAGAATGCCGCAAGGGGGTCTGAGGGCAAGCCCTCCCTAACCC
CTTCCAGCCTCCGCTCCTCGACCTGAGGAGGCCCTCACAACAGTACAGATGGCCCCAGCAGCTCGCCGGGGAGCT
GCCAAGTCTCCTGATCTGTCAAACAGAACTCAGACCAGCCAAATGAGGAATGGGAGACTGCATCAGAGAGCAGT
GACTTCACCAAGTGAAGCGCCGAGGGGACAAAGAGGCACCCCAACAGTACTGCTGACACCAAGGCTGTGGGAACT
CCTGGGGAGGTTGGAGTGGAGCCGTACCAAGGTATTTAGCCATGTCTCCGCGGAGATCTGAGCCAGAGAGCCAAAG
GATTTGAGTAAACGGAGCTTCTCAAGTCAGCGGCCAGGCATGGAACGGCAGAAATCGCGGCCCTTGGCCAGGGGGC
AAGGCTGGCAGCAGTGGCAGCAGCAGTGGAGGAGGCCGTGGGGGTCTTGAGGAAGGAGACCAGGGCCAGGACGAGGC
GACAAGAGGAGCTGGCCCTCTCCCAAGAACCGAAGTCTCTCCAGAGGAGCGTCCCGGGGGCTTCCCTGCGCT
CCCCACCTCCAGCAGTCTGTGCTCTTCCGCCGTGGACCAAGTTATCCACAGCAACCTGCTGGCATCCAACAG
GCTCTGGCCAGCTTAGTAGCCGTCAAGGAGTGTAACTGACAGGGGGTCTCAAGGCACAAGCCTTGGGCCCT
CCCCAAGCCCCCTCAGGGCCCTCTCTAGGCCCCCAACCCGATACAGAGCCCCAGAGGGTCAACAGCGCCCTCAGT
TCTGACCCCACTTTGAGGAGCCGGGGCCAAATGTTGAGAGGGGTGGTGGGACTCCTCGGAGCTCTGGCCGGGTT
AGTCCCTTTCCCTCAACTCTCGGAGCGGCCCTCCAGAAACCAAGAGCTGCTACAGAGGAATCTTTGCCAGGTT
CCTCATAGCTCTGGATCTTTGGGCTCTAAGCCTGAGGGCCAGGCCCTCAGGCAGAGTCCAGAGATACAGGCACA
GAGGCCCTGACCCCTCAGATCTGGAACCGTTTACATCTGCCACTAGCCGAAAGAGTTACCGGCCAGCTCCATG
GAGCCTTGGATGGAGCCCTGAGTCTCTTTGAGGATGTGGCTGGCAGAGAAATGAGTCAGTCTGACAGTGGGGTG
GACCTGAGTGGGGATTCTCAGGTGTCTCAGGTCCCTGACGCCAGCGAAGTTCCCGTATGAGGAGTCAAGGGG
GCAGCAGAGGGACCCCCAAGAGGCCCTGGAGGCTCCTCACCCCTGAATGCTGTTCTTGTGAGGGTCCACCTGGC
TCTGAACCTCCTAGGAGACCACCACTCGCCCCCAGATGGGGACAGAAAGAGTCCGCCGGGAGCAGCCCTGT
CCCCCTGGCCCCATTGGCAGAGACGATCAGAGCATACAGACCGAGGCACAGAGCTTGGCCCATTCGGCCATCC
CATCGACTGTGTCGCCCATCCAGTTTGGCACTAGTGACAAGGACTCAGACTTACGCTAGTGTAGGAGAGCAG
TTGAAGCAGAGAAGGAGCTAACAGCATCAGTCACTGAGGCCATTCTGTATACAGAGACTGGGAGCTGCTTCCC
AGTGTCTGCTGCTCTGCTGAGCCACAATCCAAGAACCTGGATTCTGGGCACTGTGTCCCGGAGCCAGCTCCTCA
GGCCAGCGCGTGATCCTGAGGTTTCTATGGCAGTGTGGGCCCTTCCAGTTCTCAGATCTCTGGGGAGGCCATG
GACTCTCAATTACATCAAACAGTGGAGGCTTCGCCCTGGGACACCTTCACTGCACCTTACAGATCAGAGCCC
CTATACCTACCCCCCGGCCAGCCCTCCCTCAGCACTGCTCTCTGGGGTGAAGTCTCAAGGGCCAGTTTCTGGAT
TTCTCCACAATGCAAGCTACAGAGCTGGGGAAGTGTCCCGGCTGGAGGAGTCTCTACCTCCACCTTCTCTCTC
TACTCTCCGGCTTTCTGCCCCAGTCTCTTGCTGTACACATCGTTGCTTCAGGTACGCCAGGATCTGCCATCCCT
TCGGATTTTATCTCCTCTGTGACGCTGGTGGCCAAAGTGTCTTCTCCCTCAGGGGGCTCCTGGCCAGCAG
ATGCTTCTACCCATGGTAGACTCAGAGCTGCCTGTGGTGAATTTGGCTCCCTGCGCCAGCACCACCTCTCTGCC
CCACCTCCCTTTCTGTTTACTCTGTGGGCCCTGCTCTGCAAGCCCCAGCTGGGCTGCGGGCCCCAGCTGCT
CCTGCTACTCGGGTGTGCTTCACTGCCAGGCCCTTCCCCGCTAGCTTGGGGCAGCAGAGCTGCATCCAGTG
GAATTAAGCCGCTCCAGGATTATCAAAAACCTGAGCAGCAACCTTGGGGGACCTGGATCATCAGGACTCCCCCA
ACTGGAAGGTCCTTCTCCTGCTCAATTCCTGCTCAAGGCCACGCTTCCACCTCAGGCTGGAGTCTTCGCAACC
CAGCGCGTGAACCTTTACAGCAGGCTCCCCACAGATGCCCTGCGCTGAGTACCTAAGCCTTGGGAGCGGACA
GGGCTGCCACCTCGAGAAGGGCCCTCCGACGGGCAGAGGAGCTGGTCCGAGGGGACAAGAGCCTGGGTTG
CCCCACCCCTGAGGGAGTTCTCTTGGCCCTTACCCCGGGGCTTGATATAGATTATAAATATATAAGGGG
GAAAGGGGTGGGCGGGGAGGGGTTGTGGGGCTGGGGCTCACTTCCCTCCTCCCTTCCCTGTTGCCCTGTC
CCTGGGGCTGTTTGTATAAAAGAGTATAAAAGGATT

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FIGURE 1980

MSDRSGTAKGDKKKYSSNLNFDITYKGKSLIEIQKPAVAPRHGLQSLGKVAIARRMPPANLP SLKAENKGNDPN
VSLVPKDGTDGNASKQEQSDPKSSDASTAQPPESQPLPASQTPASNQPKRPPAAPENTPLVPSGVKSWAQASVTHG
AHGDGGRASSLLSRFSREEFPTLQAAGDQDKAAKERESAQSSSGPGLRFPQNSTTWRDGGGRGPDLEGGPD SKL
HHGHDP RGGQLQSGGPPQFFPYRGMMPFFMYPPYLPFFPPYGPQGPYRYPTPDGSRFRFVAGVRGSGPMPRLVEP
VGRPS ILKEDNLKEFDQLDQENDDGWAGAHEEVDYTEKLKFSDEEDGRDSDDEEGAEGHRDSQSASGEERPPPADG
KKGNSPNSEPPTPKTAWAETSRPPETEGPPAPKFPPLPPGDYFDRGGPPCKPPAPEDEDEAWRQRRKQSSSEISL
AVERARRRREEEERRMQEERRAACAEKLRLEDEKFGAPDKRLKAEPAAFPAPSTPAPPPAVPKELPAPPAPPPA
SAPTPEKEPEEPAPAAQSTPTPGVAAAPTILVSGGSGTSTSSSGSFEASPVFQPLPSKEGPEPPEEVPPPTTP
VPKVEPKGDGIGPTRQPPSGQLGYPKYQKSLP PRFQRRQQEQQLLKQQQQHQWQQHQQGSAPPTFPVPPSPQFVTL
GAVPAPQAPPPPPKALYPGALGRPPPMFPMNDFRMMIMPPYVDPRLLQGRPLDFYPPGVHPSGLVPRERSDSG
GSSSEFPDRHAPAMLRERGTPPVDPKLAWVGDFVTATPAEPRPLTSLRQAADDDKGMSETFPVPPPPPYLAS
YPGFPEENGAPGPPISRFPLEEPGRPLPWPPGSGDEVAKIQTTPPKKEPKEETAQLTGPEAGRKPARGVGSGGQG
PPPPRRSRTETRWGPRPGSSRRGIPPEEPGAPPRRAGPIKKPPPTKVEELPKPFLQGGDETPKPPKDPPLKIT
KGLGPKKETFPNGNLSAPRLRRDYSYERVGPTSCRGGRGEYFARGRGFRGTGGRRGARSREFRSYREFRG
DDGRGGGTGGFNHPPAPRGRTASETRSEGSEYEEIPKRRRQRGSETGSETHESDLAPSDKEAPTPEKGLTQVPL
APPPPGAPPSAPARFTARGGRVFTPRGVP SRRGRGGGRFPPOVCPCGWSPPAKSLAPKKPTGPLPPSKLEPKK
LIPGPLSPVARGSGSGSVGMEDGERPRRRRHGRAQQQDKPFRFRRLKQERENAAARGSEKPSLTLPASAPAE
EALTTVTVAPAPRRAAKSPDLNSQNSDQANEWETASESSDFTSERRGDKEAPPVLLTTPKAVGTGGGGGGAV
PGISAMSRGDL SQRADKLSKRSFSSQPRGMRQNRPRPGGKAGSSGSSSGGGGGGGPGRTGPGRGDKRSWSPK
NRSRPPEERPPGLPLPPPPSSSAVFRLDQV IHSNPAGIQQAALQLSSRQGSVTAPGGHPRHKPGPPQAPQGSP
RPPTRYEPQRVNSGLSSUPHFEPEGPMVRGVGGTTPRDSAGVSFPFPKRREPRPRKPELLQEESLPPPHSSGFLGS
KPEGPGPQAESRDTGTIEALTPHIWNRLHTATSRKSYRPSMMEPMEPLSPFEDVAGTEMSQSDSGVDLSGDSQVS
SGPCSQRSSPDGGLKGAAGPPKPRGGSSPLNAVPCGPPGSEPPRRPPAPHDGRKELFREQLPPGPITGER
SQHTDRGTGEPGPIRPSHRPGPPVQFGTSDKSDSLRLVVGDSLKAEKELTASVTEAIPVSRDWELLPSAAASAEFQ
SKNLD SGHCVP EPPSSGQRLYPEVFYGSAGPSSQISGGAMDSQLHPNSGGFRPGTPSLHPYRSQPLYLPPGPAP
PSALLSGVALKGQGLDFSTIMQATELGKLPAGGVLYPPPSFLYSPAFCP SPLDTSLLQVRQDLPSPSDFYSTPLQ
PGGSGGFLPSGAPAQMLLMVDSQLPVNFGSLPPAPPPAPPLSLPLVPGALQPPSLVAPRPPAPATRLVPSF
ARPPFASLGRAELHPVELKPFQDYQKLSNLGGGSSRTPTTGRFSGLNSRLKATPSTYSGVFTQRVDLYQQA
SPDDALRWIPKWPWERTGLPPREGPSRRAEPPSGRGDKEPGLPPFR

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FIGURE 1981A

CCCTAGGCCCGGGTCCCGGATCCCGCGCACCCGCCAGGCTCTGGCAGCTTTTGGGGGAGGTGCCTGCAGGACC
CAACATACTCAATGAGCTTCAGCGCAGATGCTCCGATCGCTCGGGGCGCATGCCAAGGGAAGGATGGAAGAAG
TATTCCTCGCTCAACCTGTTTGATACGTATAAGGCAAGTCTTAGAGATCCAGAAACCCCGCTTGTGGCCCTCGC
CATGGCCTGCAGAGTCTCGGGAAAGTTGCCATTGCCCGGCGTATGCCACCTCCAGCCAACTTCCAAGCCTGAAA
GCCGAGAACAAAGGCAATGACCCCAATGTCTCATTAGTGCCAAAAGACGGAAACAGGATGGGCAAGCAAAACAGGAG
CAGTCCGACCCCAAGAGTTCCGATGCTCCCAACCTCAGCCCGCGGAATCGCAGCCACTCGCGGCTTCACAGACG
CCTGCTCCAAACGAGCGGAAACGACCCCGCAGCAGCCCGGAGAACACTCCTTTGGTTCCAAGCGGGTAAAGTCC
TGGGCAACAAGCCAGCTCCCATCGGAGCACATGGAGATGGTGAAGGGCATCAAGCTACTCTGCAGATTCTCT
CGAGAGGAATTTCCGACCTTCGAGCGGCTGGCGACACGAGCAAGGCTGCCAAGGAAGGAGTCTGCCGAACAG
TCGCTCGGGCCCGGACCAAGCTCCGCCCCCAAAATTCTACAACCTGGAGGGACGGAGGTGGCGCTGCGCTGAT
GAGCTGGAGGGCGCGGACTCCAAACTTCATCATGGTATGATCCCGGGTGGGCTACAGCTTCAGGCCCAACCC
CAGTTCCTCCCTACCGCGGAATGATGCCGCTTTCATGTATCCCCATATCTCCCGTTCCTCCGCTCATGGA
CCCCAGGGGCTTACCGATACCCCACTCTGATGGGCCAGCGGTTTTCCCGTGTGGCGGGCCCCGAGGCTCA
GGGCCACCAATGCGCTTAGTAGAGCTGTGGGTCTGCTCCTTATTCTCAAAGAGGATAATCTCAAAGAGTTTGAT
CAGTTGGATCAGGAGAATGATGATGTTGGGCGAGGGCCCATGAAGAGTTGATACATCACTGAAAAGCTCAAGTTT
AGCGATGAGGAATGGCGGAGCTCTGATGAGGAGGAGCTGAGGGCCACGAGGATTCCTCAATCAGCTTTCTGTT
GAGGAACGGCCCCCTGAAGCAGATGGCAAAAAGGGCACTCCCCAACAGCGAACCGCCACTCTTAAGACGGCC
TGGGCAGAAACCTCTCGGCTTCAGAGACAGAGCGGGGACCTCTGCCCCAAAGCCTCCCTACCCCCACCTCAG
CGGGGCCCGCCCGGGAACCTGGGGCCCCCTTGGGGATACCCAGATCGTGGGGTCTCCCTGCAAGCCCGCAGCA
CCTGAAGATCAGGATGAGGATGCGGGCAGCGACGAAGAGCAGTCTCATCTGAGATTTCCCTGGCAGTGGAGCGG
GCCCGGCGACGGCAGAGAAGAGAGCGGGCGCATGCAAGAAGAGCGCCGGCTGTGCTGAGAGACTCAAG
CGACTCGATGAAAAGTTTGGGGCAGCTGACAAGCGGCTCAAAGCAGAGCTGCTGCCCCACCTGCTGCCCTTCT
ACCCAGCTCCACCACTTCGAGTCCCTAAAGAACTCCCTGCACTCCAGCTCCACCTCCAGCTCAGCCCCAACA
CCAGAGAAAGAACTGAAGAGCAGCAGCAGGCCCTCTCTGCCAATCTACTCTCAGGTGTGGCTGCGGCT
CCCACTCTGTTGAGTGGTGGTGGCAGTACCAAGTACAGCAGTGGCAGCTTCGAAGCCAGCCCAAGTGAACCA
CAACTGCCCTCAAAGAGGGTCTGAACCAACAGAAAGGTTCTCTCTCTACCAACCCCAAGTTCCAAAGGTTG
GAACCAAGGGTGATGGGATTTGGTCCACCCGCCAGCCCTATGTCAGGGCTTGGGCTACCCCAATATCAGAAG
TCGTTGCTCTCTGTTTCCAGCGGCAGCAGCAGGAGCAGCTCCTGAAGCAGCAGCAGCAGCAGCTGGCAGCAG
CATCAACAGGGCTCTGCGCTCTTACCCCACTGCCCCCATCACCACACAGCTCTGTACCTTGGGCGCTGTGCCA
GCTCCACAGGCTCCACCCCGGCCCCCAAGGCCCTGTATCCCAAGTGTCTGCGGCGGGCCCCCACCCTGCCCCCA
ATGAACCTTGTATCCCGATGGATGATGATCTCTCTTATGTGGAGCCCGGCTCTCCAGGTCCTGCCCTCTA
GACTTCTACCTCTCTGGTGTGAGTCTCTCTCGCTAGTTCCCGAGAGCGTTCAGACAGTGGGGCTCAAGCTCA
GAGCCATTGACCGCTCATGCACTGTATGTTACGGGAACGGGGCAGCTCCACCGTGGATCAAAGTTGGCTGG
GTAGAGATGTCTTACCGGCCACACCGCTGAACCCCGCCACTTACCTACCTCTGCGCCAGGCTGGCGATGAG
GATGACAAGGGGATGAGGAGCAGAGCTCTCCAGTACCTCCCCCACCACCTATCTGGCAGTTATTCAGGCTTT
CCTGAGRAATGGAGCCCTTGGGCCCCAATCTCTCGTCTTCTCTGGAGGAACAGGGGCCCCGCTCACTCCCCCTGG
CCCCAGGCGAGTGAAGTCCGACCAAGATACAACTCCACCCAAAGAGGCCCCCTAAGGAGGAGACTGCA
CAGCTGACGGGGCAGAGCAGGCGGAAAGCCTGCCCGCGGAGTGGGAGTGGAGGCGAGGGGCCCCCACCACCA
CGCAGAGAGTCTGCAACAGACCCGCTGGGGCCTCTCCAGGAGCAGTCTGCTGGGAATCTCTCCAGAGGAG
CCAGGGGCCCCACCCCGCGGGCTGGGCTATAAAGAACTCCACCACCTACAAAGTAGAAGAGTGCCTCCC
AAGCCCCCTGAACAGGGGGATGAACCCCAACCCCAAGGCGAGCCACTCAAGATAACCAAGGGGAAGCTA
GGGGGCCCAAGGAGACCCCAACCAATGGAATCTTTCCCTGCCCAAGGCTTCGAGGAGACTATTCGATGA
AGAGTGGGTCTTACCTCTTTCGCGGGTGGGGCGAGGCGAGTATTTGCCAGAGGAGGGGTTTCGGGGGACC
TATGGGGAGCAGGGCGGGGAGCCGAAGCGGGAACTCCGAGTTACCGAGGTTTCGAGAGATGATGGGCGT
GGAGGTGGGACAGGGGACCAAAACCTCTGCTCCCCGAGGCGGCTGCCAGCGAGACAGGAGCGAGGTT
TCGAGATGAGGAAATCCCCAAGCGCGCGGCGAGCGGGCTCAGAAACAGGAGCGAGACCGCTGAGAGTGAT
CTGGCTCCTTCAGACAAGGAGGCTCCACACCCAGAGGAGGAACACTACCCAGGCTCCCTCGCTCCCCACCA
CCAGGAGCCCCACCTTACCAGCCCCAGCCGCTTCACTGCCCGGGTGGGCGAGTCTTCACTCCAGAGGGGTTG

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FIGURE 1981B

CCATCTCGCCGGGGCCGAGGAGGAGGGAGGCCCTCTCTCAAGTTTGCCACGGCTGGAGCCCTCCAGCCAAGTCT
CTGGCTCCCAAGAAACCTCCCAAGGCCCTTTGCCACCAAGTAAGGAGCCTTTGAAAGAGAAGTTGATCCAGGGG
CCTCTGTCCCCTGTGGCGCGCGGAGGAGCAATGGAGGTAGCAATGTGGCGATGGAAGATGGGGAGCGACCCCGA
AGGAGGCGACATGGGAGGGCTCAGCAGCAGGATAAACCGCCTCGTTTCCGGAGGCTGAAGCAGGAACGGGAGAAT
GCCGCAAGGGGGTCTGAGGGCAAGCCCTCCCTAACCTTCCAGCCTCCGCTCTGCACCTGAGGAGGGCCCTCACA
ACAGTACAGATGGCCCCAGCACCTCGCCGGGACGTGCCAAGTCTCCTGATCTGTCAAAACAGAAGTACAGACCAA
GCCAATGAGGAATGGGAGACTGCATCAGAGAGCAGTGACTTACCAGTGAGCGCCGAGGGGGACAAGAGGCCACCC
CCACAGTACTGTGACACCCAAGGCTGTGGGAACCTCTGGGGGAGGTGGAGGTGGAGCGGTACCAAGTATTTCAG
GCCATGTCCCGGGAGATCTGAGCCAGAGAGCCAAAGGATTTGAGTAAACGGAGCTTCTCAAGTCAGCGGCAGCG
ATGGAAACGGCAGAATCGCGCCCTGGCCCAAGGGGCAAGGCTGGCAGCAGTGGCAGCAGCAGTGGAGGAGGGCGGT
GGGGGTCTCGGAGGAAGAGCCGGGCCAGGACGAGGCGACAAGAGGAGCTGGCCCTCTCCCAAGAACCAGATCGT
CCTCCAGAGGAGCGTCCCCGGGGCTTCCCCTGCTCCCCACCCTCCAGCAGTTCTGTGCTCTTCCGCTGGAC
CAAGTTATCCACAGCAACCTGTCTGGCATCCAAAGGCTCTGGCCAGCTTAGTAGCCGTCAAGGGAGTGTAACT
GCACAGGGGGTATCAAGGCCACAAGCCTGGGCTCCCCAAGCCCTCAGGGCCCTCTCTAGGCCCCCAACC
CGATACGAGCCCCAGAGGGTCAACAGCGCCTCAGTTCTGACCCCACTTTGAGGAGCGGGGCCAATGTTGAGA
GGGGTGGTGGGACTCTCGGGACTCTGCGGGGTTAGTCCCTTCCCCCTCGGGAGCGGCTCTCCAGCA
AAACACAGAGCTGCTACAGGGAGGAATCTTGGCACCTCTCATAGCTCTGGAATCTTGGGCTCTAAGCCTGAGGGC
CAGGCCCTCAGGCAGAGTCCAGAGATACAGGCACAGAGGCCCTGACCCCTACATCTGGAACCGTTTACATATCT
GCCACTAGCCGAAAGATTACCGGCCCAAGCTCCATGGAGCCTTGGATGGAGCCCTGAGTCTCTTGGAGATGTG
GCTGGCACAGAAATGAGTCAGTCTGACAGTGGGGTGGACCTGAGTGGGATTTCTAGGTGTCTACAGTCCCTGC
AGCCAGCGAAGTTCCCTGATGGAGGACTCAAGGGGGCAGCAGAGGAGCCCCCAAGAGCCCTGGAGGCTCCTCA
CCCCGTAATCTGTTCTTGTGAGGGTCCACCTGGCTCTGAACCTCTTAGGAGACCAACCTGCCCCCCACGAT
GGGGACAGAAAGAGCTGCCCGGGAGCAGCCTCTGCCCTTGGCCCCATTGGCACAGAACGATACAGCATACACA
GACCGAGGCACAGAGCTGGCCCCATTGGCCATCCCATCGACCTGGTCCCCAGTCCAGTTTGGCATAGTGAC
AAGGACTCAGACTTACGCCTAGTGGTAGGAGACAGCTTGAAGCAGAGAAGGAGCTAACAGCATCAGTCACTGAG
GCCATTCTGTATCAGGAGCTGGGAGCTGCTTCCAGTGCTGTGCTCTGTCTGAGCCACAATCCAAGAACCTG
GATTTCTGGGCACTGTGCCGGAGCCAGCTCCTCAGGCCAGCGCTGTATCTCAGGTTTTCTATGCGAGTGTG
GGGCTTCCAGTCTCAGATCTCTGGGGAGCCATGAGACTCTCAATTACATCTCAAACAGTGGAGGCTTCCGCCCT
GGGACACCTCAGACTGCACCCCTTACAGATCAGAGCCCTATACCTACCCCGGCCAGCCCTCTCTCAGCACTG
CTCTCTGGGGTAGCTCTCAAGGGCCAGTTTCTGGATTCTCCACAATGCAAGCTACAGAGCTGGGAAGTTGCCG
GCTGGAGGAGTCTCTACCTCTCACCTTCTTCTCTACTCTCGGCTTTCTGCCCAAGTCTTGGCTGACACA
TGTGTTAGCTTACGTACGCCAGGATCTGCCATCCCTTCGGATTTTATCTACTCTCTGCAGCCTGGTGGCCAA
AGTGGCTTCTCCCTTACAGGGGCTCTGCCCAGCAGATGCTTCAACCATGGTAGACTACAGCTGCCTGTGGTG
AACTTTGGCTCCTTGCCGCCAGCACCACTCTGCCCCACTCCCCCTTCTCTGTCTACCTGTGGGCCCTGCTCTG
CAGCCCCCAGCTGGCTGTGCGGCCCCCACTGCTCTGCTACTCGGGTGTGCTCTTACCTTGCACGGCCCTTC
CCCGTCTAGCTTGGGGCGAGCAGAGCTGCATCCAGTGGAACTAAAGCCGTTCCAGAGATTATCAAAAAGCTGAGCAGC
AACCCTGGGGAGCTGGATCATCAGGACTCCCCCAACTGGAAGGTCTCTTCTGCTTCAATCCGCTCAATCCGCTCTCAAG
GCCAGCGCTTCCACCTACAGTGGAGTCTTCGCAACCCAGCGGCTGCACCTTTACAGCAGGCGCTCCCCACAGAT
GCCCTGCGCTGGATACCTAAGCCTTGGGAGCGGACAGGGCTGCCACCTCGAGAAGGGCCCTCCCGACGGGCAGAG
GAGCCTGGGTCCCGAGGGGACAAGGAGCTGGGTGCCCCCAACCCGCTGAGGAGGTTCTCTTGGCCCTTACCC
CGGGGCTTGTATATAGATTATAAATATATAAGGGGGAAAGGGGTGGGCGGGGAGGGGTTGTGGGGCTGGGGCT
CACTTCCCTCTCTCCCTTCCCTGTGCCCTGTCCCTGGGGCTGTTTGTGTTAAAAAGAGTAATAAAGGATTT

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FIGURE 1982

MSDRSGPTAKGKGDKKXSSLNLFDTYKGSLEIQKPAVAPRHGLQSLGKVAIARRMPPFANLPSLKAENKGNDPN
VSLVPKDGTDGWSKQEQSDPKSSDASTAQPPESQPLPASQTPASNQPKRPPAAPENTPLVPSGVKSWAQASVTHG
AHGDGGRASSLSRFSREFFPTLQAAGDQDKAAKERESAEQSSGPGFSLRPNQSTTWDRDGGGRGFDELEGDPDKL
HHGHDPRGGQLQSGPFPFPYRGMMPFMYPLPFPFPYGFQGYRYRTPDGPFRVAVAGRGSGPMPRLVEP
VGRPSILKEDNLKEFDQLDQENDDGWAGAHEEVDYTEKLKFSDEEDGRDSDSEGAEGHRDSSQASGEERPEADG
KKGNPSNEPPTPKTAWAETSREPTEPGPPAPKPPLPFPHRGFAGNWGPPGDYDRGGFPCKPPAPEDEDEAWR
QRRQSSSEISLAVERARRRREERRMQEERRAACAEKLRLDEKFGAPDKRLKAEPAPAPASTPAPPPAVP
KELPAPPAPPASAPTEKEPEEPAQAPPAQSTPTTPGVAAAPTTLVSGGGSTSTSSGSFEASPVPEQLPSKEGPE
PPEEVPPPTTPVPKVEPKDGGIGTRQPPSQGLGYPKYQKSLPFRQROQQEQQLLKQQQHQWQQHQQSAPPT
PVPSPPPQVTLGAVPAQAPPPFKALYPGALGRPPMPFPMNFDPRWMMIPPVYDPRLLQGRPLDFYPPGVHP
SGLVPERERSDSGSSSEFDRHAPAMLRERGTTPVDPKLANVGDFVTATPAEPRPLTSPRLQAADDDKGRMSET
PPVPPPPPYLASYPGFPENGAGPPISRFPLEEFGFRPLWPPGSGDEVAKITPFPKKEPPEEATAQLTGPAGR
KPARGVSGGGQPPPPRRESRTETRWGRPRGSSRRGIPPEEFGAPPRRAGPIKKPPPTKVEELPPKPLEQGDDET
PKPPKPDPLKITKGLGGPKETPPNGNLSAPRLRRDYSYERVGPTSCRGGRGEYFARGRGFRGTYGGRGRGAR
SREFRSYREFRGDDGRGGGTGGPNHPAPRGRTASETRSEGSEYEEIPKRRRQRGSETGSETHESDLAPSDKEAP
TPKEGTLTQVPLAPPPPGAPPSPAPARFTARGGRVFTPRGVPSRRGRGGGRPPPVQCPGWSPPAKSLAPKKPPTG
PLPPSKEPLKEKLIPGLSPVARGGSSNGGSSNVGMEDGERPRRRRHGRAQQDKPPFRRLKQERENAAARGSEKGP
SLTLTASAPAPEALTTVTVAAPARRAAKSPDLSNQNSDQANEWETASESSDPTERRGDKAPPPVLLTPKA
VGTTPGGGGGAVPGISAMSRGDLQRAKDLKRSFSSQRPGMERQNRPRPGGGKAGSSSGSSGGGGGGGRTGP
GRGDKRSWPSPKNRSRPFEEERPGLPLPPPPSSSAVFLRDQVHNSNPAGIQALALQSSRQSVTAPGGHPRHK
PGPPQAPQGESPRPPTRYEPQRVNSGLSSDPHFEEPGPMVRGVGGTFRDSAGVSFPFKRRERPRKPELLQES
LPPPHSSGFLGSKPEGPGQAESRDGTGTEALTPHWNRLHTATSRKSYRFPSSMEPWMEPLSPFEDVAGTEMSQSD
SGVDLSGDSQVSSGPCSQRSSPDGGLKGAAGPPKRPGGSSPLNAVPCEGPSPGSEPRRPPAPHDGDRKELPRE
QPLPPGPITGERSQHTDRGTEPGFIRFSHRPGFPVQFGTSDKDLRLVVGDSLKAELKELTASVTEAIPVSRDWE
LLPSAAASAEFQSKNLDGCHVPEPSSSQRLYPEVIFYGSAGPSSQISGGAMDSQLHPNSGGFRPGTPLSHPYR
SQFLYLPPGPAPPALLSGVALKQQLDFSTMQATELGKLPAGGVLYPPSFLYSPAFCEPLPDTSLQVRQDL
PSPSDFYSTPLQPGGSGFLPSGAPQQMLLPMVDSQLPVMNFGSLPAPPAPPPLLSLLEVPGLQPPSLAVRP
PPAPATRVLPSPARPPASLGRAELHPVELKPFQDYQKLSNLLGGFGSSRTPPTGRSFSGLNSRLKATPSTYSGV
FRTQVRDLYQASPPDALRWIPKFWERTGLPREGFSRAAEEPGRSGDKPEGLPPFR

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FIGURE 1983

CCGAGCTTCTTAAACACAGGCCTTGGGCCTACGGCTCTGGGGGTACTTGGGGGGCGGGGCGAGGTCTGATGAGT
AACCCCTCCCCCAGGTTCCAGAGGAAGAAGCCTCCACATCTGTCTGCCGGCCCAAGATTCCATGGCCTCCACT
TCCCGCCGCCAACGCCGAGAACGTGCTTTCGTCGTTACTTGTCTGCAGGACGGCTGGTCCGGGGCCAGGCCCTC
CTCCAGCGACACCCAGGCCCTCGATGTAGATGCTGGGCAGCCCCACCCTGCACCGGCCCTGTGCCCGCCACGAT
GCCCCTGCCCTGTGCTGCTGCTTCGGCTCGGGGTGACCCCTGCCACACGAGACCGCATGGGGACACGGCACTG
CATGCTGCTGCCCGCCAGGGGCCAGATGCCTACACCGATTTCTTCTCTCCGCTGCTAAGCCGCTGTCCCTCCGCC
ATGGGAATAAAGAATAAGGATGGGAGACCCCTGGCCAAATTTTGGGCTGGGGACCCCCCTGGGATTCTGCTGAA
GAGGAGGAAGAAGATGATGCCTCCAAGGAGCGGGAATGGAGACAGAAGCTCCAGGGTGAGCTGGAGGACGAGTGG
CAGGAATCATGGGGAGGTTTGAAGGTGATGCCTCCCATGAAACCCAGGAACCTGAGTCTTCTCAGCCTGGTCA
GATCGCTGGCCCCGGGAACATGCCCAGAAGTGCCAGCAGCAGCAGCAGAGAAGCAGAGGGATCCTGTGACCCCCCA
CGTGCTGAGGGCTCCAGCCAGAGCTGGCGACAGCAGGAGGAGGAGCAGCGGCTCTTACGGGAGCCGAGCCCCGGCC
AAGGAGGAAGAGCTGCGTGAGAGCCGAGCCAGGAGGGCGCAGGAGGCTCTAGGGGACCGAGAACCAGCCAACC
AGGGCCGGGCCCAGGGAAGAGCACCCAGAGGAGCGGGGAGGGGCGAGCCTCTGGCGATTGGTGATGTGCCCTGG
CCCTGCCCTGGGGGAGGGGACCCAGAGGCCATGGCTGCAGCCCTGGTGGCCAGGGGCCCTTTTGGAGGAACAG
GGGGCTCTGAGGAGGTACTTTAGGGTCCAGCAGGTCCGCTGGCACCCCTGACCGCTTCTGCAGCGATTCCGAAGC
CAGATTGAGACCTGGGAGCTGGGCCGTGTGATGGGAGCAGTGACAGCCCTTTCTCAGGCCCTGAATCGCCATGCA
GAGGCCCTCAAGTGACCCCTAGGGAAGAAGCAAGAACTTTCGGGCTGCAGCCTCAGGATGAGGCAGAAGGAAGGG
TAAGGGAAGGATGGGGACCAAGGAAGAGCCAGGTGCTGCTCAGCAGAGGATATGGGTGGGAGCGAAAGTTGT
AACRAAGTGGGGGTGGGGGTGCGGGGCCCCACCATGCTCCTTGACTCTGCCGTTTCTTAATAAGACCTGGTTCC
ACATCTC

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FIGURE 1984

ACAGGCATTTTCCAAAGGCAAGCCTGGAGCGCACGGATCTGTATAACCGCGGAAGGCCCTGTTCCGGTCCCTTG
CGCCTGCGCTCTTGCAGCCAAGAAGCGGGAGGCTGGAGTAGAGGGAAGCCTGCAACCGGAAGTGAAGGCAGATT
TCCCTCCTTCGTCGCTGTTGCTGCCGCATACGCGCTCTCCCTGTTTAGTTATGGCAGAGAACGATGTGGACAAT
GAGCTCTTGGACTATGAAGATGATGAGTGGAGACAGCAGCTGGGGAGATGGGCTGAGGCCCTGCCAAGAAG
GATGTCAAGGGCTCCTATGTCTCCATCCACAGCTCTGGCTTTCGTGACTTCCTGCTCAAGCCAGAGTTGCTCCGG
GCCATTGTGCACTGTGGCTTTGAGCATCCGTGAGAAGTCCAGCATGAGTGCAATCCCTCAGGCCATTCTGGGAATG
GATGTCTCTGTGCCAGGCCAAGTCGGGCATGGGAAAGACAGCAGTGTGTTGCTTGGCCACACTGCAACAGCTGGAG
CCAGTTACTGGGCAGGTGTCTGTGCTGGTGATGTGTCACACTCGGGAGTTGGCTTTTCAGATCAGCAAGGAATAT
GAGCGCTTCTCTAAATACATGCCCAATGTCAAGGTTGCTGTTTTTTTTTGGTGGTCTGTCTATCAAGAAGGATGAA
GAGGTGCTGAAGAAGAACTGCCCGCATATCGTCTGGGGACTCCAGGCCGTATCCTAGCCCTGGCTCGAAATAAG
AGCCTCAACCTCAAAACACATTAACACTTTATTTGGATGAATGTGATAAGATGCTTGAACAGCTCGACATGCGT
CGGGATGTCCAGGAAATTTTTCGATGACCCCCACGAGAAGCAGGTCTATGATGTTTCAGTGCTACCTTGAGCAAA
GAGATCCGTCCAGTCTGCCGCAAGTTCATGCAAGATCCAAATGGAGATCTTCGTGGATGATGAGACGAAGTTGACG
CTGCATGGGTTGCAGCAGTACTACGTGAAACTGAAGGACAACGAGAAGAACCGGAAGCTCTTTGACCTTCTGGAT
GTCTTGAGTTCAACAGGTGGTGATCTTTGTGAAGTCTGTGCAGCGGTGCATTGCCCTGGCCAGCTACTAGTG
GAGCAGAACTTCCCAGCATTGCCATCCACCGTGGATGCCCCAGGAGGAGAGGCTTTCTCGGTATCAGCAGTTT
AAAGATTTTCAACGACGAATCTTTGTGGCTACCAACCTATTTGGCCGAGGCATGGACATCGAGCGGGTGAACATT
GCTTTTAATTATGACATGCCTGAGGATTCTGACACCTACCTGCATCGGGTGGCCAGAGCAGGCCGGTTTGGCACC
AAGGGCTTGGCTATCACATTTGTGTCCGATGAGAATGATGCCAAGATCCTCAATGATGTGCAGGATCGCTTTGAG
GTCAATATTAGTGAGCTGCCTGATGAGATAGACATCTCTCCTACATTGAACAGACACGGTAGAGACTCGCCCCA
TTTTGGAATGTGACCGTCTGTCTTTCAGAGAGGACACCGGTGGGGTGAAGGAGACACTACTGCCCCCACC
CTGACAGCCCCCACCCTGGCTTCCATCTTTGCAACACCACCTCCTGAAACCCCATTTCTGATTTGTGAGA
ATTTTTTTTTTAACAAAACATAAAATGAAACACATGTGTCTGTGGTATCTAAAAA

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FIGURE 1985

MAENDVDNELLDYEDDEVETAAGGDGAEAPAKKDVKGSYVSIHSSGFRDFLLKPELLRAIVDCGFEHPSEVQHEC
IPQAILGMDVLCQAKSGMKTAVFVLATLQQLEPVTGQVSVLVMCHTRELAFQISKEYERFSKYPNVKVAVFFG
GLSIKKDEEVLKKNCPHIVVGTGPRILALARNKSLNLKHIKHFI LDEC DKMLEQLDMRRDVQEIFRMTPEKQVM
MFSATLSKEIRPVCRKFMQDPMEIFVDDETKLT LHGLQQYYVKLKDNEKNRKLFDLLDVLEFNQVVIFVKSVQRC
IALAQLLVEQNFP AIAIHRGMPQEERLSRYQQFKDFQRRILVATNLFGRGMDIERVNIAFN YDMPEDSDTYLHRV
ARAGRFGTKGLAITFVSDENDAKILNDVQDRFEVNISELPDEIDISSYIEQTR

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FIGURE 1986

ACAGGCATTTTCCAAAGGCAAGCCTGGAGCGCACGGATCTGTATAACCGCGGAAGGCCCTGTTCCGGTCCCTTG
CGCCTGCGCTCTTGACGCCAAGGCGGGAGGCTGGAGTAGAGGGAAGCCTGCAACCGGAAGTGAAGGCAGATT
TCCCTCCTTCGTCGCTGTTGCTGCCGCCATACGCGCTCTCCCTGTTTAGCTCTTCTGTTAGAAATAGTATCTTTG
TTTTCTTTGCTGTTCTCTCAATCCCCACTCTTACCCTTGTITTCACCTATTTTGCGAGAACCCTCCAGATC
CCCCCTCCCTTCTTCCCTGCCGGCCAGTTATGSCAGAGAACGATGTGGACAATGAGCTCTTGGACTATGAAGA
TGATGAGGTGGAGACAGCAGCTGGGGGAGATGGGGCTGAGGCCCTGCCAAGAAGGATGTCAAGGGCTCCTATGT
CTCCATCCACAGCTCTGGCTTCGTGACTTCCTGCTCAAGCCAGAGTTGCTCCGGGCCATTGTGCTGCTGGCTT
TGAGCATCCGTGAGAAGTCCAGCATGAGTGCATCCCTCAGGCCATTCTGGGAATGGATGCTCTGTGCCAGGCCAA
GTCGGGCATGGGAAAGACAGCAGTGTITGTCTTGCCCACTGCAACAGCTGGAGCCAGTTACTGGGCAGGTGTC
TGTGCTGGTGATGTGTCACTCGGGAGTTGGCTTTTCAGATCAGCAAGGAATATGAGCGCTTCTCTAAATACAT
GCCAATGTCAAGGTTGCTGTTTTTTTTGGTGGTCTGTCTATCAAGAAGGATGAAGAGGTGCTGAAGAAGAACTG
CCCGCATATCGTCGTGGGGACTCCAGGCCGTATCCTAGCCCTGGCTCGAAATAAGAGCCTCAACCTCAAACACAT
TAAACACTTTATTTGGATGAATGTGATAAGATGCTTGAACAGCTCGACATGCGTCGGGATGTCAGGAAATTTT
TCGCATGACCCCCCAGAGAAGCAGGTCATGATGTTCAAGTGCTACCTTGAGCAAGAGATCCGTCCAGTCTGCCG
CAAGTTCTAGTCAAGATCCAATGGAGATCTTCGTGGATGATGAGACGAAGTTGACGCTGCATGGGTTGCAGCAGTA
CTACGTGAAACTGAAGGACAACGAGAAGAACCGGAAGCTCTTGACCTTCTGGATGCTCTTGAAGTTCAACCAGGT
GGTGATCTTTGTGAAGTCTGTGCAGCGGTGCATTGCTTTGGCCAGCTACTAGTGGAGCAGAACTTCCAGCCAT
TGCCATCCACCGTGGGATGCCCGAGGAGAGGGCTTCTCGGTATCAGCAGTTTAAAGATTTTCAACGACGAAT
TCTTGTGGCTACCAACTATTGTGCCGAGGCATGGACATCGAGCGGGTGAACATTGCTTTAATTATGACATGCC
TGAGGATTCTGACACCTACCTGCATCGGGTGCCAGAGCAGGCCGGTTTGGCACCAGGGCTTGGCTATCACATT
TGTGTCGATGAGAATGATGCCAAGATCCTCAATGATGTGCAGGATCGCTTTGAGGTCAATATTAGTGAGCTGCC
TGATGAGATAGACATCTCCTCTACATTGAACAGACACGCTGAGAGACTCGCCCATTTTGAAGTGTGACCGTCTG
TCCTTCAGGAGAGGACACCAAGGTGGGGTGAAGGAGACACTACTGCCCCACCCCTGACAGCCCCACCCCATG
GCTTCCATCTTTTGATCACCACCACTCCTGAACCCCACTTTCTGATTGTGAGAATTTTTTTTAAACAAACTA
AAATGAACACATGTGTCTGTGATCTATAAAAAAAAAAAAAAAAAAAAAA

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FIGURE 1987

MAENDVDNELLDYEDDEVETAAGGDGAEAPAKKDVKGSYVSIHSSGFRDFLLKPELLRAIVDCGFEHPSEVQHEC
IPQAILGMDVLCQAKSGMGKTA VFLATLQQLPVTGQVSVLVMCHTRELAFQISKEYERFSKYPNVKVA VFFG
GLSIKKDEEVLKKNCPHIVVGTGRIILALARNKSLNLKHIKHFILDECDKMLEQLDMRRDVQEIFRMTPEKQVM
MFSATLSKEIRPVCRKFMQDPMEIFVDDTKLTLHGLQQYYVKLKDNEKNRKLFDLLDVLEFNQVVI FVKS VQRC
IALAQLLVEQNFP AIAIHRGMPQEERLSRYQQKDFQRRILVATNLFGRGMDIERVNIAFN YDMPEDSDTYLHRV
ARAGRFGTKGLAITFVSDENDAKILNDVQDRFEVNISELPEIDISSYIEQTR

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FIGURE 1988

AGACGCCGAGATGCTGGTCATGGCGCCCCGAACCGTCTCTGCTGCTCTCGGCGGCCCTGGCCCTGACCGAGAC
CTGGGCGGCTCCCACTCCATGAGGTATTTCGACACCGCCATGTCCC GGCCCGGCCCGGGGAGCCCGCTTCAT
CTCAGTGGCTACGTGGACGACACGCAGTTCGTGAGGTTCGACAGCGACGCCGCGAGTCCGAGAGAGGAGCCGCG
GGCGCCGTGGATAGACAGGAGGGGCCGGAGTATTGGGACCGGAACACACAGATCTTCAAGACCAACACACAGAC
TGACCGAGAGAGCCTGCGGAACCTGCGCGGCTACTACAACAGAGCGAGGCCGGGTCTCACACCCCTCCAGAGCAT
GTACGGCTGCGACGTGGGGCCGGACGGGCGCCTCCTCCGCGGGCATAACCACTACGCTACGACGGCAAGGATTA
CATCGCCCTGAACGAGGACCTGCGCTCCTGGACCGCGCGGACACCGCGGCTCAGATCACCCAGCGCAAGTGGGA
GGCGGCCCGGTGTGGCGAGCAGGACAGAGCCTACCTGGAGGGCACGTGCGTGGAGTGGCTCCCGAGATACCTGGA
GAACGGGAAGGACACGCTGGAGCGCGCGGACCCCCAAAGACACACGTGACCCACCAACCCCATCTCTGACCATGA
GGCCACCTCTGAGTGCTGGGCCCCGCGGCTTCTACCCCTGCGGAGATCACACTGACCTGGCAGCGGGATGGCGAGGA
CCAAACTCAGGCACTGAGCTTGTGGAGACCAGCCAGCAGGAGATAGAACCTTCCAGAAGTGGGCACTGTGGT
GGTGCCCTTCTGGAGAAGAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCTCACCCCTGAG
ATGGGAGCCGCTTCCCAGTCCACCGTCCCCATCGTGGGCATTGTTGCTGGCCTGGCTGTCTAGCAGTTGTGGT
CATCGGAGCTGTGGTCGCTGCTGTGATGTGTAGGAGGAAGAGCTCAGGTGGAAAAGGAGGGAGCTACTCTCAGGC
TGCCTGCAGCGACAGTGCCAGGGCTCTGATGTGTCTCTCACAGCTTGAAGGCTGAGACAGCTGTCTTGTGAG
GGACTGAGATGAGGATTTCTTACGCCCTCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTTCTGCAAGGC
ACCTGAATGTGTCTGCGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCACCCCTTGTGTCCACTGTGA
CCCCGTGTCCCATGCTGACCTGTGTTTCTCCCCAG

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FIGURE 1989

MLVMAFRTVLLLLSAALALLETWAGSHSMRYFDTAMSRPGRGEPFRFISVGYVDDTQFVRFSDAASPREEPRAPW
IEQEGPEYWDRNTQIFKTNTQTDRESLRNLRGYYNQSEAGSHTLQSMYGC DVGPDGRLLRGHNQYAYDGGDYIAL
NEDLRSWTAADTAAQITQRKWEAARVAEQDRAYLEGTCEWLRRYLENGKDTLERADPPKTHVTHHPISDHEATL
RCWALGFYPAEITLTWQRDGEDQTQDTELVETRPAGDRTFQKWA VVVVPSGEEQRYTCHVQHEGLPKPLTLRWE
SSQSTVEIVGIVAGLAVLAVVVIGAVVAAMCRRKSSGGKGSYSQAACSDSAQGS DVSLTA

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FIGURE 1990

GCGTGATGTCTCACAGAAAGTTCTCCACTCCCAGACATGGGTCCCTCGGCTTCCTGCCTTGAAGCGCAGCAGCA
GGCATTGTGGGAAGGTGAAGAGCTTCCCTAAGGATGACCCGTCCAAGCCGGTCCACCTCACAGCCTTCCTGGGAT
ACAAGGCTGGCATGACCCACATCGTGCGGGCTCTGGAGAAGATTGACCTTAAGTTCATTGACACCCCTCCAAGT
TTGGCCATGGCCACTTCCAGACCATGGAGGAGAAGAAAGCATTTCATGGGACCACTCAAGAAAGACCGAATTGCAA
AGGAAGAAGGAGCTTAATGCTGGGAACAGATATTGCAACTGGTGGGATCTCAATAAAAGTTATTTCCA

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FIGURE 1991

MSHRKFSIPRHGSLGFLPWKRSSRHCGKVKSFPPKDDPSKPVHLTAFLGYKAGMTHIVRALEKIDLKFIDTPSKFG
HGHFQTMEEKKAFMGPLKKDRIAKEEGA

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FIGURE 1992

ATTCTCCCCAGAGGCCGAGATGCGGGTCATGGCGCCCCGAGCCCTCCTCCTGCTGCTCTCGGGAGGCCTGGCCCT
GACCGAGACCTGGGCTGCTCCCCTCCATGAGGTATTTGACACCGCCGTGTCGCGCCCGGCCGCGGAGAGCC
CCGCTTTCATCTCAGTGGGCTACGTGGACGACACGCAGTTCTGCGGTTGACACGCGACCCGCGAGTCCGAGAGG
GGAGCCCGGGGCCCGTGGGTGGAGCAGGAGGGGCCGAGTATTGGGACCGGAGACACAGAACACAAAGCGCCA
GGCAGAGGCTGACCGAGTGAAGCTGCGGAACCTGCGCGGCTACTACAACAGAGCGAGGACGGGTCTACACCT
CCAGAGGATGTATGGTGCAGCTGGGGCCGACGGGCGCCTCTCCGCGGTATGACCACTCCGCTACGACGG
CAAGGATTACATCGCCTGAACGAGGACCTGCGCTCCTGGACCGCCGCGACACCGCGGCTCAGATCACCCAGCG
CAAGTTGGAGCGGGCCGTCGCGCGGAGCAGCTGAGAGCCTACCTGGAGGGCAGTGCGTGGAGTGGCTCCGAG
ATACCTGGAGAACGGGAAGGAGACGTCGAGCGCGCAGAACCCCAAAGACACACGTGACCCACCCACCCCTCTC
TGACCATGAGGCCACCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGATCACATGACCTGGCAGCGGGA
TGGGGAGGACCAGACCAGGACACCGAGCTTGTGGAGACAGGCCAGGAGATGGAACCTCCAGAAGTGGGC
AGCTGTGGTGGTGCCTTCTGGACAAGAGCAGATACACGTGCCATATGACGACAGGGGGCTGCAAGAGCCCT
CACCTGAGCTGGGAGCCATCTTCCAGCCCCACATCCCCATCATGGGCATCGTTGCTGGCCTGGCTGTCTGGT
TGTCTAGCTGTCTTGGAGCTGTGTCCACCGCTATGATGTGTAGGAGGAAGAGCTCAGGGCATTTCCTCCAC
AGGTGGAAGAGGAGGAGCTGCTCTCAGGCTGCGTGACAGAACAGTGCCAGGGCTCTGATGAGTCTCTCATCAC
TTGTAAAGCCTGAGACAGCTGCCTGTGTGGGACTGAGATGCAAGATTCTTACACCTCTCCTTTGTGACTTCAA
GAGCCTCTGGCATCTTTTCTGCAAAGCGCTGTAATGTGTCTGCGTTCCTGTTAGCATAATGTGAGGAGGTGGA
GAGACAGCCCACCCCGTGTCCACCGTGACCCCTGTCCCCACACTGACCTGTGTTCCCTCCCGCATCATCTTCC
TGTTCAGAGAGGTGGGGCTGGATGTCTCCATCTCTGTCTCAAATTCATGGTGCACTGAGCTGCAACTCTTACT
TCCCTAATGAAGTTAAGAACCTGAATATAAATTTGTGTCTCAAATATTGTCTATGAAGCGTGTATGGATTAAAT
AATAAGTCAATCTAGAGTIGAGAGAGCAAATAAGACCTGAGAACCTTCAG

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FIGURE 1993

MRVMAPRALLLLLSGGLALTETWACSHSMRYFDTAVSRPGRGEPRFISVGYVDDTQFVRFSDAASPRGEPRAPW
VEQEGPEYWDRETQNYKRQAQADRVSLRNLRGYYNQSEDSHTLQRMYGCDLGPDLGRLLRGYDQSAYDGKDYIAL
NEDLRSWTAADTAAQITQRKLEAARAAEQLRAYLEGTCVEWLRRLYLENGKETLQRAEPPKTHVTHHPLSDHEATL
RCWALGFYPAEITLWQRDGEDQTQDTELVETRPAGDGTfQKWAAVVVPsGQEQRyTCHMQHEGLQEPLTLsWEP
SSQPTIPIMGIvAGLAVLVVLAVLGAVVTAMMCRRKSSGHFLPTGGKGGSCSQAACNSAqGSDESLiTCKA

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FIGURE 1994

GGAAAGGTGTACGCAGGCGCAGTGGCGTCTAAATTTGGGCCCACTAAATGCGTTCGGAGCATCTCCGCGCCACAGGC
GGCTCCTCCTCACTGCGCGCAACCCGGGAAAACCTTGTGAACATAATCAGAAAAAGTGAAGCGCGGAGATCTTGGGG
CGCTGTCCAAATGGCGCGGAAGAGAACAAATGAGCTGGCCAAATCGGGAACGGCACGGGGGCGGGCTCCTCGCGCG
GAAGTTCGGGCCCGGGAATTCGAAGGAGGGGTAGCGCTGCCCCGCGCAGAGGCCGCGCCCTCTCTGGCCCCG
GCTTCTTGGCTGTCAACAGATGCAGCAACGTCGGCTCCTGCGAGGAGGCCAAGGGGTCCTCGGGATCCCGCGCA
CAGGCTGGCACTGCTTTAAGAGGAGGCTACTCGAGACTGCGCGCGGGGTAGATCCGAAACGGGGCTGGGGCG
GAGTGGGAAAAGCGCGGGTATGCCCTGCATGATCGCGGGGAGCTCCTTCCTGTTTTATCCCACTTAGAGAAAGCC
GGGAAGTAGGGGTTTAGGTCCAATTTGTGGAGTACTTAAGGACTCGTTTGCACCTTCTTTGGGGGATGACAGT
GGATTCAATGCCCTCGAGGTTCAACCAAGTTATGAGTGAGGATTGGCCAGAAGATCGGGGCGCAGGCAAGCAGG
AGTGCTCTATTAGGATAAGCAAGTTTGACAGGAAGAAGCTGCTCTCTCCGAATTACACAGAGGTGATGTGTTCG
TATTGCACGTAGACGTGTGTATAACAGGACCTCCTTCCCCGCGCCCCGCCACCCGACACACAGGAGCTGCCT
AAAGTATCCTTGCCCTTGCAATTGGAGGCTCCCCAAATATTTGTGATCTGAGGATCCAGCTCAAGTGAGGTGCC
ATAGGACGTGTTCTGAGTTTGCAATTGCACGGAGACCTTCTGGAAATTTTTCATTGCAAGTCGGCTTAACCAAT
TTTGCAATTGAGTCTAGGCTGCTTGCACTCTGAATTTGGGCTATTACAGGTAGTGTGCTCAAAGTTGAAACCGCAT
ACAGCACAACTCAAGTTTGATCAGACTGGGAAGCGAACTTAAGCCAGCGGTGCTGCGGCCAGGAGTGGGAAAGG
AAATGGATGCCTGAAGTGGAAAGGTGGTGACAGAGGGGGCACCGCCATGCTGCCCTGCTTCCAAGTGTCTGCGCA
TAGGGGGCGCAGGGGCGGTGATCTCTACACCTTCCACCCCCCGCGGGGCTGGCTGCACCTATCGCTTGGGCC
ACAGGGCCGACCTGTGTGATGTGGCCCTGCGGCCACGACAGGAGCTGGCCTGCTGAGTCCAGCCGGAAC
TGCAATGCCGAGCCCCGGGGTGATGACTGGAGGGTCAGCCTGGAAGACCACAGCAGCCAGGTTGAGCATTAAGCAG
GGCAGCTTTGCCCTTGGGTGGTTGAAGCGCCAGGCTGGAATGAGTAAGGTCTCCACAAGACCTGCTGCTGCCT
CCCACTATCCCACTGATTGGATGGATAGTCGTGGTCCAGACCTTCATCTTCCACCAAGAAGTGTGCACAGTCAG
AAGCTCTCTGCGCACTGACCCCTTTTGTGCTCCGTTTACTCATACAGGACCTGGGATATCATCAGAAAGATATC
ACAGTGGGGATGTTCTGAGGCCACTAGAGGCCAAGTTTAGACTTGATTAGTTTCCAGCTTTGCTGAGGCATCT
GTTCTGGGTTAGGGCAGTTCTATGTTGAATAATGTTTTTAATAATCTGGGCGATGCTTTCTCCGTGACTTGAGG
CAGTTAGCCTCAGAAAACCTAGATTACATTTGAGTTTGGCACTGCCTCTTGGTAAAGTCAGCTGTAGGAGTGT
TATGGTTATTAGACTATAGTAGCCAACATTATCTAGTGCTTACTGTTATGAGCCAGGGCCCTATTTTAAGTGTAT
TGAATGTAGGTGGTACTAATATTATCTTCATTACAGTAAGGAAAATGAGGCACAAAAGGTTAAGGAACCTGT
CCAGGGCTGGGCATGGTGGTTTACACCTATAATCCAGCAGCTTTGGGAGGCTAAGGCAGGGTGGATCACTTGAGCT
CAGGAGTTTCAGAGACCGCTGGGCAACATGGTGAAAACCTGTCTCTACCAAAAAATTAATTAATTTTAAAAAAA
AGCTTGGGCGGGTGGCTCAGCCCTGTAAATCCAGCAGCTTTGGGAGGCCGAGATGGGCAGATCAGCAGGTCCAGGA
GTTTCAGAGCAATCCTGACCAACATGTTTGAACCCCATCTGTCTGAAAAAAAATACAAAAATTAGCCAGGTGTG
GTGGCGTGACCTGTAAACCCAGCTACTCAGGAGGCTGAAGCAGCAGAATCACTTGAACCCGGGAGGGGAGGTT
CGAGTGAGCTGAGATCGCACCACTGCACCTCCAGCTTGGGCGACAGAGCAGACTCCATCTCAAAACAACAAACA
ACCAAAGCTTGGCCAGGGTACATACTGTTAAGTGGTAGACTTAGATCTGAAGCAGCTGGGAGCTGGGGGAGA
GTGAGCATGTTTGAACAACTGACCTTAGGGCGGGGACGGTGGCTCAGCCCTGTAATCCAGCAGCTTTGGGAGGC
TGAGGCGGGCAGATCAGGAGGTGAGGAGTATGAGACAGCTGGCCCAACATGTTGAACCCCTGTCTTGTCTGCTAAAA
ATAAAAAATTAGCCAGAGCTGGTGGCAGATGCCTGTAATCCAGCTACTCAGGAGGCTAGGCGAGGAGAATGCG
TTGAACCTGGGAGCGGTTCAAGCTTGGCAATAGACAAAACCTCCATC

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FIGURE 1995

TTGGTGGATTCTCAGTCCCTGCCGCCGGGGCGCCCTGGGATAGCGGCGGGGCTTCTGAACAGATCTCGGCC
CCTTTCCAAACACTCCTGATGCTCATTTGCTCTCGCTCTCTTTTCGACACCACTTTTGGGGGCTGAGGCACTCA
CGGGGCTCTCCCGAGTTTTCACCTCGTTTCTACACAGTCGGAGCCCATGGATCTCCCATCTCCGGAGGAACCGT
GAAGCCAAACAGAAGCGCTGCGAGAGAAGCAGGCTACTCTGAGGCTGAGATAGCAGGGGAGAGCAAGTCACT
GCAGAAATCCATTAAAGGCTTGGAGGCTAAGGAGTTAGTATTGTATGAAATCCCTACGAAACCCGGTGAAGGAAA
GATGTCCTCTGGGGCTGCTGCTCTGCATACAGCCCGATATGTGAGGCTGCTGATACCGTGGTGGGTCAGGA
GAGGGCTTCTTCAAACAGAATACAGGCCGCTGCCCAAGCTACAGGGGAGACCTTTTCCATGTGTATCCCA
CCTCCCAATGTCACTGGCTCCCTGCACATTTGGCCACGCACTACGGTGGCCATACAGGATGCCCTCGTGCCTGG
ACCCGGATGCGTGGGGATCAAGTGTCTGGGTCCCTGGTTCAGATCATGCGAAATGCTACACAAAGCTGTGGTG
GAGAAAACACTGTGGAAGGAACGGGGAGTGAGGAGACATGAGCTGAGCCGGGAGGCTTCTTAGGGAGGTGTGG
CAGTGGAAAGGAGGCGAAAGGTGGAGAGATCTGTGAGCAGCTGCGAGCTCTGGGTGCCCTCCCTGGACTGGGATCGA
GAGTGTITTTACCATGGATGTTGGCTCCAGTGGCTGTGACTGAAGCTTTTGTGCGGCTCTACAAGCGGGGTTG
CTGTACCGGAACCATCAGCTTGTCAACTGGTCACTGTGCTTTAAGATCAGCACTCTCGGACATTGAGGTGGAGAAC
CGGCCCTGCTGGCCACACAGCTCTCGACTGCTGGCTGCCCAACCCCGTGTCTTTGGCTTCTATTCTTCT
GTGCTCTCCCGCTGGATGGAGGCTGATGAGAGGTTGTGGTAGGAACCAAGGCCAGAGACGCTGCTCGGGA
GATGTGCTGTGGCGGTTCATCCAGCACTCGCGATACACACATCTACAGGCGACAGCTTCTGCAACCTTTG
ATGGGGCAGCCTTCTCCCTCATACAGACTATGCTGTTCAGCCCATGTGGGACCGGGGGAGTGAAGGTGACT
CCAGCTCACAGTCTGCGGATGCTGAGATGGGGGCCGACATGGCTTGAGCCCTTGAATGTCTTGGGAGGAT
GGGACCATGACCTCCCTCTCGCGGGAGCTGGCTGCGAGGTCTTCAACGGTTTGTGGCCCGGAAAAGATAATGTCT
GTGCTGAGTGAATGGGGCTGTTTCGGGGGCTCCAGAACCCCACTGGTACTGCCACTTCGACCGGTTCTGGG
GATGTGATAGTACTGCTCGAAGAACCAAGTGGTTTGTCCGCTGCCAGGAATGGGGGCCAGAGCTGCCAAGCT
GTGGAGTGGGGGCCCTGGAGCTCAGTCCCTCTTCCACAGAAAGTGGCAGCACTGGTTTTCCCATATTGGG
GACTGGTGTGCTCCCGGACGCTGTGGTGGGGCCATCAGATTCAGCCCTACCTGGTTGTAGAGGACCATCGCGAG
GGAGAAGAGGACTGTTGGTGGTTGGCGGTCAGAGGCTGAGGCCAGAGAGTAGCAGCGGAATGACAGGGAGG
CCAGGGCCAGAGCTGACCTGGAGAGGGATCTGATGTCTAGACACATGGTTTTCTTCTGCGCTGTTCCTCTT
TCTGCGCTGGGCTGCCCAAGAGACCCAGACCTTGTCTGTTTTACCCCTGTCACTTTTGGAAACGGGCGAGC
GACCTTCTGCTGTTCTGGGTGGGCGCATGGTCACTGTTGGGACCCAGCTCACAGGGCAGCTGCCCTTCAGCAA
GTGCTCTTTCATCCCATGGTTTCGGGACAGGCGAGGCGGGAAGATGAGCAAGTCCCTGGGGAATGTGCTGGACCCA
AGAGACATCATCAGTGGGGTGGAGATGCAAGTGTGACAGAAAAGCTGAGAAAGGAAATTTGGACCTTCAGAG
CTGGCCATTGTGGCTGCAGCAGAGAAAAGGACTTCTCAGCGGATCCCTGAGTGTGGGACAGATGCCCTGAGA
TTCACACTCTGCTCCCATGGATTCAGGCGGGCGCATGCACTGTCACTCTGTAGGCTCAGAGCTGGCCGACAT
TCTGCAACAAGATCTGGAATGCTCTTCGCTTTATCCTCAATGCTTTAGGGGAGAAATTTTGCCACAGCCTGCT
GAGGAGCTGTCTCCCTGCTCCCGATGGATGCTGATCTGAGCGGCTTGCCCTGGCTGCCAGGAGTGTGAG
CGGGCTTCTCACCAGGAGAGCTCTCGCTCGTCACTCATGCTGCACTCTCTGAGCTTCAACACTCTGTGAGC
GTCTACTGGAGGCTGTGAAGCCGCTGCTGTGGCACTCGCCCCGCCCCCTGGGGCCCCCTCAGTCTCTGTCTCT
TGCCTGACCTCGGCCCTCGCCTCTTGGCCCCACTGATGCCCCCTTCTGGCTGAAGAGCTCGGACAGGCTGCC
CCAGCGCTGTTGGCCCCCTGCCGCCAGCATCTCGTTGCCCTTACCCAGCGCTGCAGCTTGGAGCACTGG
CGCCAGCCAGAGCTGGAGCGGCGCTTCTCCGGGCTCAAGAGGCTGTCGAGGTGCTGAAGGCTCTCGAGCCAG
TACCAGCTCACAAAGCGCCGCCGAGTGCTGCTGCAGAGCTCAGAGCTGGGACAGGAGGCTCTTCCAGGCC
TCTTGGAGCCCCCTGGGACCTCTGGGCTACTGTGGGCTGTGGGCTGTATACCCCAAGCGCAGCAGCTCCCTC
GGCTGGGCCCCAGGCTCCACTCAGTGACACGGCTCAAGTCTACATGGAGCTGCAGGCGCTTGGTGACCCGACATC
CAGCTACCTCTGTTAGGCCCTTGCACCAAGGTACAAGTTGAGAAAGAGCTGCAGGCTCAGACCGAGGACCCATCA
GAAGGGGAGCAGGAGCTCAGAGGCAACAAAGCTTTCTTCCCTCAGCTGGAATGTCAAACTTGACAAAGGCA
GCCCTCAGCTCCCGGACGCTGATGGATGAGCTTCCAGCCCGAGGAGGCTTCACTCATCATCCCCATCA
AGTTTTCTCCCTCTCAGACCTGTCTTTGAGGACAAACAGATTGTGACGTGTGAGGTGCACTGGGACGCTCAGA
GACTATGTGGTCCATCGCTTCATTGTGTAATGAGGACACAGACTGGCTTGGTCGAGTGTGGTGTCTCT
GAGATGCTCACATTACTGCCCGCTGCCCTCCACCTGGAAGTCTGGGAATGAGGAGATTGAGATAAATTTTGA
AATCCC

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FIGURE 1996

MGQPLPLITDYAVQPHVGTGAVKVTPAHSPADAEMGARHGLSPLNVIAEDGTMTSLCGDWLQGLHRFVAREKIMS
VLSEWGLFRGLQNHFMVLPICSRSGDVIEYLLKNQWVRCQEMGARAANKAVESGALELSPSFHQKNQHWFSHIG
DWCVSRLWNGHQPAYLVVEDHAQGEEDCWVVGSRSEAEAREVAELTGRPGAELTLERDPDVLDTWFSALPFF
SALGWFPQETPDLARFYPLSLELTGSDLLLFVWGRMVMLGTQLTGQLPFSKVLLHPMVDRQGRKMSKSLGNVLDP
RDIIISGVEMQVLQEKLRSGNLDPAELAIVAAAQKKDFPHGIPECGTDLARFTLCSHGVSQAGDLHLSVSEVQSCRH
FCNKIWNALRFILNALGEKFVPQAEELSPSSPMDAWILSRALAAQECERGFILTRELSTVTHALHHFWLHNLCD
VYLEAVKPVWLWHSRPLGPPQVLFSCADLGLRLAPLMPFLAEELWQRLPPRPGCPPAFSISVAPYPSACSLHW
RQPELERRFSRVQEVVQVLRALRATYQLTKARPRVLLQSSEPGDQGLFEAFLEPLGTIGYCGAVGLLPPGAAAPS
GWAQAPLSDTAQVYMEQLGLVDPQIQPLLAARRYKLQKQLDSITARTPSEGEAGTQRQKLSLQLELSKLDKA
ASHLRQLMDEFPAPGSP

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FIGURE 1997

TCCCATCTTTTCTCGCATTTTTTCACCATCTTTCCCTCAATCTCCAGGAGCCAAATGCGAGACTTTTGCGTCCGA
TTAAGCGACGGCCCCGAGACTTTGGGGTGC GC GAGGAGATCGACAGAGTGGTGATGGGAGAGCACCCCTTCAAGGGG
ACTGAACCGAGTACACCTACAATGCAGGAATCTGCAGGAATTCTTAGGGGGCTGAGCCCTGGGGTATTGGACCG
ATTGTATGGGCACCTGCCACATGTCTGGCTGTCTTCAGGGAGCTCCCATCTTGGCTAAGAATCTGAGCAAGGCTCA
GATGCTCTTTCTGGAGCAGCCTTTGCCACAGGCTGTGTAGCTCTGTGGGTAAAGAAGGAATTGAGCAAGGCTCA
GGAGGAAAGTACAGGGCTGCTGAGCGGCCTCCGGATCTGGCACACCCAGCTGCTCCAGGCGGGCTCCAGGGCCT
CATCCTCAACCCCATTTTCGCCAGAACCTCCGATTGCCCTTCTGGGTGGGGGGAAGGCCTGGTCTGATGACAC
AAGTCAGCTGGGACCAGACAAAGCATGCCCGGGACGTCCCTCCCTTGACAAGTACGCCGAGGAGCGATGGGAGGT
GGTCTTGCACTTCAATGGTGGGCTCCCCCAGTGCAGCTGTACGCCAGGACTTGGCTCAGCTCCTCAGCCAGGCTGG
GCTCATGAAGAGTACTGAACCTGGAGAGCCGCCCTGCATTACTTCCGCTGGCTTCCAGTTCCTGTTGCTGGACAC
CCCGGCTCAGCTCTGGTACTTTATGTTGCAGTATTTCAGACAGCCAGAGCCGGGCATGGACCTGGTAGAGAT
TCTCTCCTTCTCTTCCAGCTCAGCTTCTCTACTCTGGGCAAGGATTACTCTGTGGAAGGTATGAGTGATTCTCT
GTTGAACCTCCTGCAACATCTGCGTGAGTTTGGGCTTGTTTTCCAGAGGAAGAGGAATCTCGGCCTTACTACCC
CACACGCCCTGGCCATCAATCTCTCATCAGGTGTCTCTGGAGCTGGGGGCACTGTGCATCAGCCAGGTTTCATTGT
CGTGGAAACCAATTACCGACTGTATGCCACACGGAGTCGGAGCTGCAGATTGCCCTCATTGCCCTCTTCTCTGA
GATGCTCTATCGGTTCCCAACATGGTGGTGGCGCAGGTGACCCGGGAGAGTGTGCAGCAGGCAATCGCCAGTGG
CATCACAGCCAGCAGATAATCCATTTCCTAAGGACAAGAGCCACCAGTGTATGCTCAAAACAGACACCTGTGCT
GCCCCCACCATCACCGACCAGATCCGGCTCTGGGAGCTGGAAAGGGACAGACTCCGGTTCCTGAGGGTGTCTCT
GTATAACCAAGTTCTGTGCGCAAGTGGACTTTGAGCTGTCTGGCCCCACGCGCGGGAGCTGGCGTGTCTGTT
CGAGAACTCGGCCAAGCGGCTCATGGTGGTGACCCCGGCCGGGCACAGCGAGCTCAAGCGCTTTTGGAAAGCGGCA
GAAACATAGCTCTCTGAGAGCGCGGGACTTGGACACGGACCTCGGCGGGCGGACTGGGCGGGGCGGGGCATCAGA
ACTCAGGTGTTTTTATTATTACGCGTCAGGGCTTTTCTTGTTTAATAAGTTATGATAGCT

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FIGURE 1998

MESTPSRGLNRVHLQCRNLQEFLLGGLSPGVLDRLYGHHPATCLAVFRELP SLAKNWNVRMLFLEQPLPQAAVALWV
KKEFSKAQEESTGLLSGLRIWHTQLLPGGGLQGLILNPIFRQNLRIALLGGGKAWSDDTSQLGPDKHARDVPSLDK
YAEERWEVVLHFMVGSPPSAAVSQDLAQLLSQAGLMKSTEPGEPPCITSAGFQFLLLDTPAQLWYFMLQYLQTAQS
RGMDLVEILSFLFQLSFSTLGKDYSEVGMSDSLNLFLQHLREFGLVFQRKRKSRYYPTRLAINLSSGVSAGAGGT
VHQPGFIVVETNYRLYAYTESELQIALIALFSEMRYRFFNMVVAQVTRESVQQAISGITAQQIIHFLRTRAHPV
MLKQTPVLPPTIITDQIRLWELERDRLRFTEGVLYNQFLSQVDFELLHAHARELGLVLFENSAKRLMVVTPAGHSD
VKRFWKRKQKHS

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FIGURE 1999A

TTAGGAAGTTATTAACTGATCTCTGCCCTAGTTTCTTCATGTGTTAAATATGGATAGTAATAGTATCTACCTTA
TGAAGTGACTGTGAAGATAAAATATGATTCTGTTTAAGGGTTTAGGCCAGTGTCTGGCAGAGGGGAAGCATT
TAAAAATATAGCTGATGCTGTTTAAACAATGACTGTTGTTGTTTACTGTTATCTGTTATCCCAAGCGGCCCAT
CTGTCTGTTGCTGTGAGCTATGACTCAGTCCCTGATTAACTACGCACCACCCATTATATCCCTGCAGAGATG
CTGCCCCACCCCTTAGGCCGAGGGATCAGGAGCTATGGGACCAGAGCCCTGTCACTTATCTGCTGCTGTCT
CTTGGTGGCAAGTGAGATGTGACATGAAGGGACATTTGATCCTGCCAAGTGCCTGATCCCTGGGCATGCA
GGACCGGACCATCCAGACAGTGACATCTGCTTCCAGCTCCTGGTGCAATTCCACTGCCGCCGCCACAGCAG
GTTGGAGAGCAGTGACGGGATGGGGCTGTGTCGCCCGCAGGGTCGGTGTTCCTCCCAAGGAGGAGGATCTTGCA
GGTGGATCTACAACGACTGCACCTGGTGGCTGTGTTGGGCACCCAGGACGGCATGCCGGGGCTGGGCAAGGA
GTTCTCCCGGAGCTACGGGCTGCGTTACTCCCGGGATGGTGCCTGATGGGTGGAAGGACCGCTGGGGTCA
GGAGGTGATCTCAGGCAATGAGGACCTGAGGGAGTGGTGCTGAAGGACCTTGGGCCCCCATGTTGTGCCGACT
GTTTGCCTTCTACCCCGGGCTGACCGGGTCTGAGCGTCTGCTGCGGGTATAGAGCTCTATGGCTGCCTTGGAG
GGATGGACTCTGTCTTACACCGCCCTGTGGGCGAGACAATGTATTATCTGAGGCCGTGTAACCTCAACGACTC
CACCTATGACGGACATACCTGGGCGGACTGCAGTATGGGGTCTGGGCCAGCTGGCAGATGGTGTGGTGGGCT
GGATGACTTTAGGAAGAGTCAGGAGCTGCGGGTCTGGCCAGGCTATGACTATGTGGGATGGAGCAACCAAGCTT
CTCCAGTGGCTATGTGGAGATGGAGTTTGAAGTTTGAACGGCTGAGGGCCTTCCAGGCTATGAGGCTCACTGTAA
CAACATGCAACGCTGGGAGCCGCTGCTGCCGTGGCGGGTGAATGTGCTTCCGGCTGGCCCTGCCATGGGCTG
GGAGGGGGAGCCCATGCGCCACAACCTAGGGGGCAACCTGGGGGACCCAGAGCCGGGCTGTCTAGTGCCCT
TGGCGGCCGTGTGGCTCGCTTCTGCACTGCCCTTCTCTTTCGGGGCCCTGGTTACTCTTCAGCGAAATCTC
CTTCATCTCTGATGTGGTGAACAATCTCTCTCGGCACTGGGAGGCACTTCCCGCAGCCCCCTGTGTGGCGCC
TGGCCCACTTCCCAACAATCTCAGAGCTTGGAGCTGGAGCCAGAGCCAGCCGCTGGCCCAAGGCCGAGGG
GAGCCGACCGCCATCTCATCGGCTGCTGGTGGCCATCATCTGCTCCTGCTGCTATCATGGCCCTCATGCT
CTGGCGCTGCACTGGCGAGGCTCTCAGCAAGGCTGAACGGAGGGTGTGGGAAGAGGAGCTGACGGTTCACCT
CTGTGCTCCTGGGACACTATCCTCATCAACAACCGCCAGGCTCTAGAGAGCCACCCCTACCAAGAGGCCCG
GCTCTGTGGGAATCCGCCCACTCCGCTCCCTGTGTCCCAATGGCTCTGCTGTGCTCTTCCAACTCAGCCTA
CGCGCTCCTTCTGGCCACTTACGCCCTGCCCTCGAGGCCGCCGCCCAACCCGCTGGGCCAAACCCAC
CAACACCCAGGCCCTACAGTGGGACTATATGGAGCTGAGAAGCCAGGCCGCCGCCCTCTGCGCCCACTCCCCA
GAACAGCGTCCCCATTATGCCGAGCTGACATTGTTACCTGCAGGGCGTCAACGGGGGCAACACATATGTGT
GCTGCACTGGGCACTGAGGGCAGTGGGGATGGGCCCCCAAGTGGATTTCCTGCACTCGACTCCGCTCAA
GGAGAAGCTTGGCGAGGGCCGTTTGGGAGGTTGCACTGTGTGAGGTGCAGAGCCCTCAAGATCTGGTTAGTCT
TGATTTCCCCCTTAATGTGCGTAAGGGACCACTTTGCTGGTAGCTGTCAACCTTACGCGAGATGGCCACAA
GAATGCCAGGAATGATTTCTGAAAGAGGTGAAGATCATGTGAGGCTCAAGGACCCAAACATCATTCGGCTGCT
GGCGCTGTGTGTGAGGACAGCCCTCTGCATGATTACTGACTATGGAGAAGCGGCACTCAACGATTTCTCT
CTGTCGACCACTGAGGAGCTGGAGCAAGCGAGCGGGGCCCTGGGGAAGGAGGCTGCGGAGGGGCCCACT
CAGCTACCCAATGTGCTGCTGATGTGGCAGCCAGATGCTCCTCCGCGATGCGCTATGCGCACACTCAACTTGT
ACATCGGGACCTGGCCACGCGGAATGCTAGTGGGGAATTTACCACTAAATTCGACACTTTGGCATGAG
CCGGAACCTTATGCTGGGACTATTACCGTGTGACGGCCGGGAGTGTGCCATCCGCTGATGGCTGGGA
GTGCATCTCATGGGGAAGTTACAGACTGCGAGTGACGTGTGGGCTTTGGTGTGACCTGTGGGAGGTGCTGAT
GCTCTGTAGGGCGACGCTTTTGGCAGCTCACCAGCAGCAGGTGATCAGAGAAGCGGGGAGATCTTCCGGGA
CCAGGGCCGCGAGGTGTACCTGTCCCGGCCCTGCTGCGCCGAGGGCCTATATAGCTGATGCTTCGGTGTCTG
GAGCCGGGAGTGTGAGCAGCGACCCCTTTTCCAGCTGCATCGGTCTTGGCAGAGGATGCACTCAACAGGT
GTGAATCACACATCCAGTGCCCTCTCTCAGGAGGACATCAGGGGAAGCCAGTGCATTAACCAAGAGGAC
CAATGGCACTCTGCCCTTCCCTCCGACAGCCCATCACTCTAATAGAGGAGCTGAGACTGCAAGTGGGCTGG
GCCCAACCGAGGAGTGTAGGCCCTTCTCCCTTCTCGGACACTCTCATGCTCCCTTCTGTCTCTCTCTCT
AGAAGCCCTGTGCGCCACCCAGCTGGTCTGTGGATGGGATCTCTCCACCTCTCTAGCCATCCCTTGGGA
AGGTTGGGGAATAATATAGGATAGACACTGGACATGGGCCATTGGAGCACTGGGCCCATGGCAACCACTGAT
TCTTGAGAGGTGGCTGGCCGCCAGCTTCTCTCCCTGTGACCACTGGGCACTGGCCAGCAATGGG
GTGAGGAGGACAAGAAGGAGAGGAAATGTTTCTTGTGCTGCTCCTGTACTGTGCTCAGCTTGGGCTCTCT

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FIGURE 1999B

CTCCTCCATCACCTGAAACACTGGACCTGGGGGTAGCCCCGCCCGCCCTCAGTCACCCCCACTTCCCACTTGC
AGTCTTGTAAGCTAGAACTTCTCTAAGCCTATACGTTTCTGTGGAGTAAATATTGGGATTGGGGGGAAAGAGGGAG
CAACGGCCCATAGCCTTGGGGTTGGACATCTCTAGTGTAGCTGCCACATTGATTTTCTATAATCACTTGGGGTT
TGTAACATTTTGGGGGGAGAGACACAGATTTTACACTAATATATGGACCTAGCTTGAGGCAATTTTAATCCCCT
GCACTAGGCAGSTAATAATAAAGTTGAGTTTCCAC

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FIGURE 2000

CGCTGCTCCAGCCTCTGGGGCGCATTCCAACCTTCCAGCCTGCGACCTGCGGAGAAAAAATTACTTATTTTCT
TGCCCCATACATACCTTGAGGCGAGCAAAAAATTAAATTTTAACCATGAGGGAAATCGTGCACATCCAGGCTGG
TCAGTGTGGCAACCAGATCGGTGCCAAGTTCTGGGAGGTGATCAGTGATGAACATGGCATCGACCCACCGCTGT
CTTCGCTGGTCCGATGTCCATGAAGGAGGTGATGAGCAGATGCTTAACGTGCAAGAACAAGACGACGCTACTT
TGTGGAATGGATCCCCAACAATGTCAAGACAGCCGCTCTGTGACATCCCACCTCGTGGCCTCAAGATGGCAGTCAC
CTTCATTGGCAATAGCACAGCCATCCAGGAGCTCTCAAGCGCATCTCGGAGCAGTTCACTGCCATGTTCCGCCG
GAAGGCCTTCCTCCACTGGTACACAGGCGAGGGCATGGACGAGATGGAGTTCACCGAGGCTGAGAGCAACATGAA
CGACCTCGTCTCTGAGTATCAGCAGTACCAGGATGCCACCGCAGAAGAGGAGGAGGATTTCCGCTGAGGAGGCCGA
AGAGGAGGCCTAAGGCAGAGCCCCATCACCTCAGGCTTCTCAGTTCCTTAGCCGCTTACTCAACTGCCCTT
TCCTCTCCCTCAGAAATTTGTGTTTGTCTGCCTCTATCTTGTGTTTTTGTGTTTTTCTTGGGGGGGGTCTAGAACAG
TGCTTGGCACATAGTAGGCGCTCAATAAATACTTGTTTGTGAATGTCTCCTCTCTTTCCACTCTGGGAAACC
TAGGTTTCTGCCATTCTGG

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FIGURE 2001

MMAACDP RHGRYLTVA AVFHGRISMKEVDEQMLNVQNKNSSYFVEWIPNNVKTAVCDIPRGLKMAVTFIGNSSA
IQELFKRILEQFTAMFGRKAPLHWTGEGMD

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FIGURE 2002

ATGGCCCCCTGCACCTGCTCCTGATCCCTGCTGCCCTCGCCTCTTTTCATCCTGGCCCTTTGGCACCGGAGTGGAGTTC
GTGCGCTTTACCTCCCTTCGGCCACTTCTTGGAGGGATCCCGGAGTCTGGTGGTCCGGATGCCCCGCCAGGGATGG
CTGGCTGCCCTGCAGGACCGCAGCATCCTTGCCCCCTGGCATGGGATCTGGGGCTCCTGCTTCTATTTGTTGGG
CAGCACAGCCTCATGGCAGCTGAAAGAGTGAAGGCATGGACATCCCGGTACTTTGGGGTCTTCAGAGGTCACTG
TATGTGGCCTGCACCTGCCCTGGCCTTGCAGCTGGTGATGCGGTACTGGGAGCCCATACCCAAGGCCCTGTGTTG
TGGGAGGCTCGGGCTGAGCCATGGGCCACCTGGGTGCCCTCCTCTGCTTTGTGCTCCATGTCATCTCCTGGCTC
CTCATCTTTAGCATCCTTCTCGTCTTTGACTATGCTGAGCTCATGGGCCTCAAAACGGTATACCTACCATGTGCTG
GGGCTGGGCGAGCCTCTGGCCCTGAAGTCTCCCGGGCTCTCAGACTCTTCTCCACCTGCGCCACCCAGTGTGT
GTGGAGCTGCTGACAGTGCTGTGGGTGGTGCCCTACCCTGGGCACGGACCGTCTCCTCCTTGCTTTTCTCCTTACC
CTCTACCTGGGCCTGGCTCAGGGCTTGATCAGCAAGACCTCCGCTACCTCCGGGCCAGCTACAAAAGAAACTC
CACCTGCTCTCTCGGCCCAGGATGGGGAGGCAGAGTGAGGAGCTCACTCTGGTTACAAGCCCTGTTCTTCCTCT
CCCGCTGAAATCTAAATCCTTAACATCCAGGCCCTGGCTGCTTCATGCCAGAGGCCAAATCCATGGACTGAAGG
AGATGCCCTTCTACTACTTGAGACTTTATTCTCTGGGTCAGCTCCATACCCATAAATCTGAGTTTCAGCCACT
GAACTCCAAGGTCCAATTCTCACAGCAAGGAAGAGTGGGGTATGGAAGTCATCTGTCCCTTCACCTGTTTAGAGC
ATGACACTCTCCCTCAACAGCCTCCTGAGAAGGAAAGGATCTGCCCTGACCACTCCCTGGCACTGTTACTTG
CCTCTGCGCCTCAGGGGTCCCTTCTGCACCGCTGGCTTCCACTCCAAGAAGGTGGACCAGGGTCTGCAAGTTCA
ACGGTCATAGCTGTCCCTCAGGCCCAACCTTGCGCTCACCACTCCCGGCCCTAGTCTCTGCACCTCCTTAGGCC
CTGCCTCTGGGCTCAGACCCCAACCTAGTCAAGGGGATTCTCTGCTCTTAACCTCGATGACTTGGGGCTCCCTGC
TCTCCCGAGGAAGATGCTCTGCAGGAAATAAAGTCAGCCTTTTCTAC

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FIGURE 2003

MAPALLLIPAAALASFILAFGTGVEFVRFTSLRPLLGGIPESGGPDARQGWLAALQDRSILAPLANDLGLLLFVG
QHSLMAAERVKAWTSRYFGVLQRSLYVACTALALQLVMRYWEP IPKGPVLWEARAEPWATWVPLLCFVLHVISWL
LIFSILLVFDYAEMLMKQVYYHVLGLGEPLALKSPRALRLFSHLRHPVCVELLTVLWVPTLGTDRLLLAFLLT
LYLGLAHGLDQQDLRYLRAQLQRKLHLLSRPQDGEAE

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[illegible]

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FIGURE 2004B

CTGCCTCCTCCCTTGACCACAGCCTGGTTTACAAATTCATCAGCTCCCAGCCCCACCTGCCAAAGTCCCAGGTT
TACAAGCCACGCTTACTTGCTGTGCTGCGTGGAATTCTCTCCTCTGTCCCCCTCCAGTCTCCTCATTGGAGTGAC
CTGAAGGTGTGGCTTCTCCACTTTTTCTCAGTATTACTTTGCCTTAGTTTTCCCCAAGAGGGAAGGCTGGAAC
CTTAACCTCTGTACCCCTTGATAGTTATTTAATTCTGTTTCCTAGTGTTTACAAATTGAACGAATTGAGATGG
TGTCGGGTGGCTAAGGAGACCTCACCTCTCCTTCCCCATTGTGCCGCCTTTATCAATTGCCTGTTTTGTTTTG
TTTGTTTTTAACTTCCATAATAAAATGGAGTTCCTTC

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FIGURE 2005

MATIPDWKLQLLARRRQEEASVRGREKAERERLSQMPAWKRGLEERRAKLGLSPGEPSPVLGTVEAGPPDPDES
AVLLEAIGPVHQNRFIRQERQQQQQQRSEELLAERKPGPLEARERRPSPGEMRDQSPKGRESREERLSPRETR
ERRLGIGGAQELSLRPLEARDWRQSPGEVGDSSRLSEAWKRLSPGETPERSLRLAESREQSPRRKEVESRLSP
GESAYQKGLTEAHKWRPDSRESQEQLVQLEATEWRLRSGEERQDYSEECGRKEWPVPGVAPKETAELSETLT
REAQGNSSAGVEAAEQRPVEDGERGMKPTGKWKTLNSGKAREWTPRDIEAQTQKLEPPESAELLES PGVEAGE
GEAEKEEAGAQRPLRALQNCSSVP SPLPPEDAGTGGLRQEEEEAVELQPPPPAPLSPPPAPTAPQPPGDPLMS
RLFYGVKAGPGVGAPRRSGHTFTVNPRRSVPPATPATPTSPATVDAAVPGAGKKRYPTAEEILVGGYLRLSRSC
LAKGSPERHHKQLKISFSETALETTYQYPSESSVLEELGPEPEVPSAFNPAAQPDDEDEEELLLLQPELQGGGL
RTKALIVDESCRR

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FIGURE 2006A

AGGTTTGAATTTTCTCGGAGAAAGACAGGCCGGCCACGAGGAAAACAGAAACAGCCGACGACATCTAAGCCC
TTGAAAGAGTCTCTGAGAGAGGGGGGAAAGGAAAAACAGCAGCCACGACCCAAACACTTGTGTCTTCTGCCCTT
CCCACATATCTTGGCCACCCACACGCCACGCTGCTTGGGACTTGAATCTTGTGGCTGGCCGAGGACCGCTACATCA
TAACCTTCAAAAAATATCAACCACCTCCCTTCCCAAACACCCAAATCTACTCATCCAGGCTTACTTTTGTAA
TCCACTCAGAATTTTTTCTGGCAGCCCTCCCTAAATGGAGTTGGGTGGGGGGGAAATGAATACTGAGTTGGC
CTTTATTTTAAAGACTTTTTGATCCAAATGAGGCCCTTAAATAATTGAGTTTGTGGCTCGTGGTGGTGT
TATTTTTTCTCCAAATTTTACCCCTCCCTCGAGCCGAGGTGCTGACGTCGCAAAAAAATGGATAAA
ACCACCATCATGGGTTCGGGTCCCATAGACCCCAAAGAACTTCTCAAGGGCCTGGACAGCTTCTTAAACCGAGAT
GGGGAAGTCAAAAGTGTGGATGGGATTTCCAAGATCTTCAAGTTTGTGATGAAGGAAGCAGAAAGATGGTGTGGA
TGCATTACTTGAACATTTCTCTGACAGCCGTTCAACGAAATATTGGTCAAAATTTATTGACGTTGGCGGTAC
AAACTTCTTAACAATTTGGCTGACGTATTCAAAGACAACCAACAACTTCCCTCCTCCAGCAAAATTTACTGACC
CTGCAGCATCTACCGCTCACTGTAGACCATCTCAAGCAGAAACACAGCTAACTGGTGAAGCAGCTGAGCAAG
TCAAGTGAGGATGAAGAGCTCCGGAATTTGGCTCAGTCTTGTGACGACTGGATGGCTGTATCCGCTCTCAG
AGCATACCCAGCTGCTGAGAAAGATAAGAAAGAACTAAAGATGAAGGAAAAAGTCAACTACCTTCTCTGAG
GACCTTTGACAGAGGTGAAGGCTGAGACCCGGGCTGAGGAGGCCAGAGAAGAGAGGAGAGGCCCAAGTCT
CTTGCGACACGACACCCAGCTCATGCGCAAGTTTCGTTCCACTGGACTAGAGCTGAGAGACCACTCTTGGTGCTC
GTGAAGAAGAAATGCCAGCAGCTGGTGGTTTCTGACAAGTACAACCTTAAACCCATCCCTTCAAAGCTCAGAGC
AACGTAGCTGCTCCAGGAGATGCCATCCCTCCGTCGAGAGAAGAAATCAAGCCACTCAACACCAACCTAATGCC
ACCAAAGAGATCAAAAGTGAAGTATCCCGCAGACGCTATGGAGGCGCTGGGCTTTCTGGATGCTCTTAATCA
GCCCTGTTCAGGCACTCAAAATTAAGAAGAAAAAAGTACTGTCACTACCGCTGCCAAGCCAGCCCCCTT
GAAGGGAACAGCAGCAGAAACCAAGCAGCCAAACCTTCTTCCGAGAACAGCAGCCACCTTCTGAGGCAATG
GACGCGAGCCGTCCAGGCACCCCGTTCCCTCTGTTGAAGTCCCGGAGCTCATGGATACAGGCTCTTTGGAGCCA
GGAGCTCTGGATGCCAAGCCAGTGGAGAGTCTCGGAGACTCTAACCACCTGACCCGGAAGGCAGGAAGGAAA
AGTGTGACATGGCTGAGGAAGGCAAACTGAGAGAATTTCTATTTTGAATTTGATGAAACTGCAACGAGTAAAT
GTGAATAAGATCAAGGACTTTGGTGAGGCCGCTAAGCGAGAGATACTGTGACAGCGACATGCATTTGAGACAGG
CGGCGCTGAGCCATGATAACATGGAGAGAAGGTGCCCTGGGTGTGCCCCGGCCCTGGTCTCCCTCACT
CTTGTCACCCCTGGAAGCAATCTGACGAGGATATATCCAGGCTGAGCCGGAAGGAATCTTCCAGGAGCTC
TTCTGAAACAGGAGAGTCTCATGAGCTGATCTGAGCCCTACGAGCCATACCCCTAAACTCATCCCTTA
GATGAGGAGTGTTCATGGATGAGACTCCGTATGTTGAGACTCTGGAACCTGGGGGGTCAAGTGCTCACTGAT
GGGGCAGGAGGCTCCAAGTTGCCTCAGTTCTGGCCAATCTTATGGGAAGCATGGGTGCTGGAAGAGGCCCCCAA
GGCCCTGGAGGAGGAGGCAATTAAGTCCAAGAGATCTCTCACTCCATCATGGGTAGCCCAACAGGCTCATCTTCA
GAGGAATCTGAAACAAGAGACTATTCGGACAGATCAAGCAGATGCTGGTGGCCATGGACTCCTAGGCCCT
GGCCCAATAGCCAATGGTTTCCACACAGGGGGTCTGGGGGCCCAAGGGCATGACGACTTTCCCTCTGGACCT
GGGGGACCTATGCCAGGTGGCCATGAGGCGCTGGTGGGCCATGGGTCCAGCTCTTCTGGGCTCTCAGCCCT
CCCCGGGAGGTGATCCCTTCTGGATGGCCGGCGGACCTATGCGGGGTGGCCCAATGGCGGGGGTCCAGGA
CCAGGCTCTGGACCATACCATAGAGGCCGAGGTGGCCGAGGAGAAACGAACTCTCTCTCTCTCTCTCTCTC
CGAGCGCCAGAGGAGGTGCTCTGAGGAGGAGACCCCAATGGAACGAGGGGGCCCTGGTGGGGCATGGTTGA
GGTGGTGGGCATGTCCTACGAAGGCCCTGGTGGGGCATGGGCAACAGCATGGACATGCTCCCCAGAGGC
CTGTGCGGTGTCATGGAAGTGGGCATCGCCCCATGAAGGCCCTGGTGGTATGAGTGGTGGGGGTGAGGACAT
CGTCCCCACGAAGGCCCTGGCGGTGGCATGATGCTGGCATGCGCCATGCTCCCCATGAAGGCCCTGGCGGAGA
ATGGGTGCGGTGGTGGACATCGCCCCACGAAGGCCCTGGCGGAAGCATGGTGGAGTGGTGGACATGCTCCC
CATGAAGGCCCTGGACAGGGGGGCCCATGGCCACCGGCTCATGATGTTCTCTGGTACCGAGGCCATGACCAT
CGAGGGCCGCCACTCATGAGCACCGCTGGCCATGATGGTCTGGCCAGGGGGAGGGGCCACGAGGGCAGCAT
GGAGGCCACGACCATGGAGGAGACATGTCAAACGCGCTGTCTGCCACATTTCTGATGAAGGGCAACTGCGCC
TATGAGAACAATGTGCTCTTACACCCGGGTGTCAATGGGCCCTTCCCTAGGGACATTTGCTGCTGCT
GTTCAACAACCCCTGTGAGCTGAGCTGCTCTTTCACCTGTGTTATGGCTTCTGTGAGGCCATTTTCCCTT
TTCCCAAGCTGATGAGGAGCCGGCCCTCAGTTCCTCACTGCTTGGGCTTCTGGGGTTTCTGATCACTGGT
CGCATGTGATACATATTTCTCCAGTCTGGGAGGAGAGAGACTGGAACGTTCTGGACTGCTGAAGAGGAG

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FIGURE 2006B

ACCCAGTTGGCTTCACITTTTGTAGAAGATTGCGCCTGTACCCCAAACCCCTTCCAGTATTACCCCTTAATGCTTG
AGAACCTAAAGCTGGTTATCCTGGCGAACCCCTACCCCTTCTATTGCGGGTCCCACATGCACACAGAACTCTG
ACACAGGATCAGCTGCACTTAAGAAATCATCCCACTAAGTTCATTATTCTCATGGGGTGGGGAGATGCTGAAA
GGGGTATTGTATATCCCACTGCACTGAGAGGGCTCAATCAGCTGGATTGAGTTCTGGAACACACATCATCCCCA
CCCCCCCCCAGCGTGGGCTACCCATTCCTAGTCCTTTCTCAAGTGGGACCTTCAACTTTCTGTGAACACCCAGT
CTGCGTCTCTGGGTCTGCTAGGTTTCGATGATGGCGAACTCGTATCTGCATCCGGTGCAAGTTTTAGCTGGCAGAGG
TGAGACCGGTGGTGTCTGCTTGCCTTTGCCAACTATAGCCAGTCTGGAGACTTGATAAAATACTTCAGTGAGACC
AGCTTCTCATCAACTTGGGCCCGGCGTGTGGGCCTGAAAGTCACACTACATGCACTGCCTTTGGGAGTCAGTCTC
ACTCCCTGCTCCCACTGGAACTTGCCAGCGTGAAGGAGGCTTCAGGTACTTCACCTGTCAACCACCTCTGA
ATCCCCACCAAGCGCCTTCCTGGGTGGATTCAACAAGATGATTTTGCCCTTTCCAGTTTCTCTCTTCACITTTGG
CATCAGTTGTTTTCTATGAAAACAGTGGATTGGTTGGGTTTTGTGACAGGTCTTGGGTTAGAGCCAAAATGGATT
TGAGGATGAGTATTTTTTTTGGTTTTGTATTTTGTACATTATAATAAACAGTGGAAAGAGAAGCAGCTT

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FIGURE 2007

AACCCAAGCGGGACAAAGGACTTTTGGGGGAGGTCAAAGGGCACGAAGTTGTGCCTACAGCTGTTACCATAGTAA
CCGAGGACCGGATGTGGCGATCTTGGCGGTGCGACAGTCCTCTTCTCAGGCCCTCTGGCCCCGAGAGCCTGTTGAC
TCTGTGACACACTCTGAGGAGCTGGTTGTGGTGTTCAGCGAGGGGAAGAAAGAGTAATTTTTTCAAAGCATT
TATAGAAACCGCAGCAAAGGGAAGGTGTGAGGTTGCCGCCATGCCCTGGCAGAACGGAGGAGGCAGTTGGCTCCGG
AATCGCGCCGCCGCAGATGTTTCTCCGCAACCTTCCGGAAGTGGAAATGGCGGAGCCTCAGCAATTGCTGCCACCG
ACCCCCCGGAAGCGGAAACAGAATCCCGCGTGCCCTTCTCTACTACCTCCAAATCCCGCTGCAGCCATTGCC
GCAGACCGATGCCGAAACGAAAGAGCAGAATCATCACCAGCCACCGACACAGCAGCAGCCCCCGCTGCCCGAG
CGGGAAGAGACTGGAGATGAGGAGGATGGGAGTCCCATCGGACCACCCAGCCTTCTGGGCCCTCCCGCCATGGCC
AATGGAACCTTGGCGACCCTAAGTCAGCTCTTACAGAGGTCCTCCAGGATCAAGGGGACCACTGATTCCACCA
CTGCTGAGTCTCCACCTCTCTCTTGGGTAGAGGCCAATTCGGAGAGGGCTTGGCCCCAGGCTAGCCCATAT
GGTCGTGGTTGGTGGGAGTCAATGCAGAACCTCTTTTCCGGGGCCAGGCCATGGGGTCCACACGGGGAAGC
TTTCAAGGAACAGAGAAACCTCGAAGGCTCAAAGCTGGTCTCTTATCAAGAATACCTGCCGCCCAAGGAT
GACCCCGAGGTTATGGAAGACAAATCCGACCGCCTGTCTGCCGACATTTTGCCAAAAGGGCCACTGTCGATAT
GAGGACCTCTGTGCCTTCTACCATCCAGGCGTCAATGGACCTCTCTGTGAGACTGTGCCTTCCCATCAGGCTG
GAAGGAGCTCTCTGTGACTAGCGGCCATTTATTTCTGTAGCCCTATGATGGCTACTGTGAGGCTCTTCTAAC
ACCTCAGTCAGTGACACACCCATCCCATCCACCCTTCCCGGTGTGGGTCAGAGATGGTGTTCATCACTGG
TGCGGGGCATACGCGCTTTCTCTGATCCAGCCTGTAGAGACTCGCCTTGGGACCCATTTTGCTCTCTTTTTCAG
TTGCCTCTGGATCTTCTTTCCCGTCATCAATGACTGCTGAACAGGAAACCTCTTTGGTGTCTTTCTTGTGCA
TCTGTCCACCTGTTCCCGAGTATTGCCCTCAATTCCTGAGAGCCTGGAGCGGTTTCTACCATTCCTTCTTTT
AGCTGCTGTTTTAAGTCCTTTTATGTGACATTCCTACCCCCAATGTTGTGAGCTGCTGTGAAACTCAGCCA
GGTTGTCTAACCTGGGGTCAAGTTTGGGTGACTGGTGACAGGTACTTCTCAAAGGGCCACTCTCCCTGCCTTTG
GATTTATAGTTTCTCTGTGCTAGCATGATCCCCACCGCTATGGTCTATCTATGATCACGGTCTTTGTGAAAC
TGTGCTATCCCTTGTAGCTTTTCTCAGTGTCCGIGGCATTTTGTGACTTCCAGCACTAGAATAAGTTTTCCTG
CCAAATGAGTGAGGCGCTTGGTGCCCTCTGGACTTCCCACTTCCCAACATGGGAGAAATTGGAACCTTCCATC
AGACTGCCCTCCCTGGCCCTCCCATTTCTTCTCTGTGGTTATCTGAGTCTGACACAGACCCATGACATGCTCT
ATAAAGCCTCCAATGGCTTTATCCTACCTAGATCCCTTCCAGCCCATTTTAATTAGACTATGTCATTGTGAGGCC
ACCACTCCATTCAATTGAATTCGTGAATCTCCACCTTGCCATATCTTTGGGTAGAAGCTGGACAGTACTGTTGCC
CTCTTCCAATCCTCTTCCCTACATCCCTGGCACTGGTTGTTTCTGTGAAAACAGCAGTGAACAGGTTCAAGTTT
TGAACTGGCCCTGGGAAATGGGTGAGGAGTTGTATTGGCAAGAGGAGGGGTGAGAGCTGTTGGAGAACTGAGA
ATGAGGTTTTTTTTTTTTTTTCTTTTAACTTTTTTATATTAGTAATAAATGCAGTGGAAACCAAGCATTTTAT
TTAAAAAAA

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FIGURE 2008

MPGRTEGGSWLRNAAAAADVLRNLPEVEWREPOHCCPPTPRKRKQNPVFLPHYPPNPAAAAIAADTMPKRKKQNHH
QPPTQQQPPLPEREETGDEEDGSPIGPPSLGPPPMANGKPGDPKSALHRGPPGSRGFLIPPLLSLPPPPWGRGP
IRRG LGPRSSPYGRGWGVNAEPPFFGPGHGGPTRGSFHKQRNPRRLKSWSLIKNTCPPKDDPQVMEDKSDRPV
CRHFAKKGHCRYEDLCAFYHPGVNGPPL

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FIGURE 2009

GGGAGCTCGGCGGAGGGCGGGCCAGGTGACTGGTCCGGGCCATGCCGAGGAAGAAGCCATTACAGCGTGAAGCAGA
AGAAGAAGCAGTTGTCAGGACAAACGGGAGCGGAAGAGAGGGCTTCAAGATGGGCTGCGCTCCAGTTCCAACAGCC
GCAGCGGGAGCGGGAGCGCGGAGAGGAACAGACCGACACCTCGGACGGGGAGTCTGTGACCCATCATATCCGCA
GGCTTAACCAAGCAGCCTTCTCAGGGGCTGGGTCCACGAGGCTACGACCCAAATCGATACCGACTGCATTTTGAGA
GAGACAGCAGGGAGGAGGTAGAGAGGAGAAAGAGAGCAGCCCGGGAGCAAGTTCTACAGCCGGTCAGTGCTGAGT
TGTTGGAGCTGGACATCCGGGAGGTGTATCAGCTTGCTCAGTTCTGGACTTTCTCGACGTCCTCCTTGGAGCT
ATGAGATGTCGAAGGAGCACTAATGAGCCAAAGGGAACGGAGCTTCCAAGACTATCTTGGGAAGATTATGAGG
CTTACTCCTCTGAGAACTCAGCTACTTTGAGCACAATCTGGAGACATGGAGGCAGCTGTGGCGGGTGTAGAGA
TGCTGTGACATCGTCTGCTTATCACTGATATCCGACATCCAGTTGTGAATTTCCCGCCAGCACTTTATGAGTATG
TGACTGGAGAACCTGGACTGGCCCTGGTGTGCTGGTTTGAACAAGGTGGATCTGGCCCCGCCAGCTCTTGTGGTTG
CCTGGAAGCATTATTTCCATCAACACTATCCCGAGCTCCACGTCGTCCTTTTACCTCTTTTCCCGGACCCCC
GCACCCACAGGATCCTAGTAGTGTCTTGAAGAAGAGTCGGAGGCGGGGAGAGGATGGACTCGGGCCCTGGGGC
CAGAGCAGTTGCTGAGAGCCTGTGAAGCCATCACTGTGGGGAAGTGGACTTGAGCAGCTGGCGGGAGAAGATTG
CTCGGGATGTGGCTGGGCCACCTGGGGTAATGGCTCTGGGGAGGAGGAGGAAGAGGAGTGGCCAGCAGTCC
TGGTGGAGCAGCAGCTGATTCAAGCAATGGAGCCAACCTGGCCCAACCCAGAGCGCTACAAGGATGGGGTGGTGA
CCATCGGCTGTGTGGGTTTCCCTAATGTGGGAAAGTCTCGCTGATCAATGGGCTGGTGGGGCGGAAAGTCGTGA
GTGTCTCCAGAACCCGCGCCATACCCGATACTTTAGACCTACTTTCTTACCCCTCTGTGAAGCTCTGTGACT
GCCCAGGCCTCATCTTCCCATCTCTTCTGCCTAGGCAGTTGCAGGTTCTGGCAGGGATCTACCCCTATCGCCCA
TCCAGGAGCCCTACACTGCTGTGGGCTACCTGGCTCCCGAATTCCCGTGCAGGCCCTGCTCCACCTGCGCCACC
CAGAGGCTGAGGAGCCCTCAGCGGAACACCCCTGGTGTGCTTGGGACATCTGTGAAGCCTGGGCAGAGAAACGTG
GTTACAAGACAGCAAGGCGGCTCGGAATGATGTGTACAGAGCAGCCAACAGTCTCTTGCGGCTGGCAGTGGACG
GCCGCCCTCAGCCTGTGTTTTCATCCCCCAGGCTACAGTGAACAGAAAGGCACCTGGGAGTCCATCCAGAGACCA
CGGAGCTGTGTGTTTTCAGGGCAGGGTGGGGCCAGGAGTACGAGGAGGAGGAGGAAGGGATGAGGAGACCCCACT
GCTCTGTGAGGAGGAGGAGAGGAGGACCGGATGCGGATGAGGAGGAGAGGGGATGAGGAGACCCCACT
CGGCTCCAGGGTCCAGCCTGGCTGGCCGAACCCCTATGCGCTGCTGGGTGAGGATGAGTGTGAGTCTTCCGCGC
CAGCGCCATCTTCCCTCCAGTATCTTGTGTTTGGACTGACCTGGGGGTATCTCCCTCTGCCACCCCAATTGT
GAATAAAGATTGTTTGTGTTTGTAGCCCTTCCCCAGATGAAGTGAAGTGAAGCGGCTGTTCCAGGCTAACAGCT
GTGGGAGGCTTCTCTCCTTCTCTCCCTCTTTT

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FIGURE 2010

MPRKKPFSSVKQKKQLQDKRERKRGLQDGLRSSNSRSGSRERREEQDTSDGESVTHHIRRLNQQPSQGLGPRG
YDPNRYRLHFERDSREEVERRKRAAREQVLQPVSAELLELDIREVYQPGSVLDFPRRPWSYEMSKEQLMSQEER
SFQDYLGKIHGAYSSEKLSYFEHNLETWRQLWRVLEMSDIVLLITQIRHPVVNFPPALYEYVTGELGLALVVLN
KVDLAPPALVVAWKHYFHQHYQLHVVLFTSFPRDPRTQDPSSVLKKSRRRGWTRALGPEQLLRACEAITVG
KVDLSSWREKIARDVAGATWNGSGEEEEEDGPAVLVEQQTDSAMEPTGPTQERYKDGVVITIGCVGFPNVGKSS
LINGLVGRKVVSVSRTPGHTRYFTYFTLTPSVKLCDCPLIFPSLLPRQLQVLAGIYPPIAQIQEPYTAVGYLASR
IPVQALLHLRHPAEDPSAEHPWCÄWDICEAWAEKRGYKTAKAARNRVYRAANSLLRLAVDGRLSLCFHPPGYSE
QKGTWESHFPETTELVVLQGRVGPAGDEEEEEELSSSCEEEGEEDRDAD EEGEGDEETPTSAPGSSLAGRN PYA
LLGEDEC

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FIGURE 2011

GGGATCATGGGTAGATGGAACCCCTCTTTTACTCCTCTCGGAGGCCCTGGCCCTTACCCAGACCTGGGCGGGCTCC
CACTCCTTGAAGTATTTCCACACTTCCGTGTCCCGGCCCGGCCCGGGGAGCCCGCTTCATCTCTGTGGGCTAC
GTGGACGACACCCAGTTTCGTGCGCTTCGACAACGACGCGCGGAGTCCGAGGATGGTCCGCGGGCGCGCTGGATG
GAGCAGGAGGGGTGAGTATTGGGACCGGGAGACACGGAGCGCCAGGGACACCGCACAGATTTCCTGAGTGAAC
CTGCGGACGCTGCGCGGCTACTACAATCAGAGCGAGGCCGGGTCTCACACCTGCAGTGGATGCATGGCTGCGAG
CTGGGGCCGACAGGCGCTTCTCCGCGGGTATGAACAGTTCGCCTACGACGGCAAGGATTATCTCACCCCTGAAT
GAGGACCTGCGCTCTGGACCGCGGTGGACACGGCGGCTAGATCTCCGAGCAAAAGTCAAATGATGCCTCTGAG
GCGGAGCACAGAGAGCTACCTGGAAGACACATGCGTGGAGTGGCTCCACAAATACCTGGAGAAGGGGAAGGAG
ACGCTGCTTCACCTGGAGCCCCAAAGACACAGTGAACACCCATCTCTGACCATGAGGCCACCCCTGAGG
TGCTGGGCGCTGGGCTTCTACCTGCGGAGATCACACTGACCTGGCAGCAGGATGGGAGGGCCATACCCAGGAC
ACGGAGCTCGTGGAGACCAGGCTGCAGGGGATGGAACCTTCCAGAAGTGGCGAGCTGTGGTGGTGCCTTCTGGA
GAGGAGCAGAGATACAGTGCCATGTGACGATGAGGGGCTACCCGAGCCCGTACCCCTGAGATGGAAGCGGCT
TCCAGGCCACCATCCCATCTGCGGCTCATTTGCTGGCTGGTTCTCCTTGGATCTGTGGTCTCTGGAGCTGTG
GTTGCTGCTGTGATATGGAGGAAGAAGAGCTCAGGTGGAAGGAGGGAGCTACTCTAAGGCTGAGTGGAGCGAC
AGTGCCAGGGGTCTGAGTCTCAGAGCTTGTAAAGCTGAGACAGCTGCCTTGTGTGCACTGAGATGCACAGCT
GCCTTGTGTGCGACTGAGATGAGGATTTCTCAGCGCTCCCTATGTGTCTTAGGGGACTCTGGCTTCTCTTTT
TGCAAGGCTCTGTAATCTGTCTGTGCTCTGTTAGCACAAATGTGAGGAGGTAGAGAAACAGTCCACCTCTGTGT
CTACCATGACCCCTTCTCACAAGTGAACCTGTGTTCTTCCCTGTTCTTTCTTATAAAAATAAGAACCTGGG
CAGAGTGGCGAGCTCATGCTGTAAATCCAGCACTTAGGGAGGCCGAGGAGGGCAGATCAGAGGTCAGGAGAT
CGAAACCATCTTGGCTAACACGGTGAAACCCGCTCTCTACTAAAAAATACAAAAAATAGCTGGGCGCAGAGGCA
CGGGCTGTAGTCCAGCTACTCAGGAGCGGAGGCAGGAGAATGCGCTCAACCCGGGAGGCGGAGTTGCACTG
AGCCAGGATGTGCGGACTGCATCTCCAGCTGGGTGACAGGGTGAAACGCCATCTCAAAAAATAAAAAATAAAAA
TAAAAAAGAACC

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FIGURE 2012

MVDGTL L L L L L S E A L A L T Q T W A G S H S L K Y F H T S V S R P G R G E P R F I S V G Y V D D T Q F V R F D N D A A S P R M V P R A P W M E Q
E G S E Y W D R E T R S A R D T A Q I F R V N L R T L R G Y Y N Q S E A G S H L Q W M H G C E L G P D R R F L R G Y E Q F A Y D G K D Y L T L N E D
L R S W T A V D T A A Q I S E Q K S N D A S E A E H Q R A Y L E D T C V E W L H K Y L E K G K E T L L H L E P P K T H V I H H P I S D H E A T L R C W
A L G F Y P A E I T L T W Q Q D G E G H T Q D T E L V E T R P A G D G T F Q K W A A V V V P S G E E Q R Y T C H V Q H E G L P E P V T L R W K P A S Q
P T I P I V G I I A G L V L L G S V V S G A V V A A V I W R K K S S G G K G S Y S K A E W S D S A Q G S E S H S L

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FIGURE 2013

CCTGAGTCAGACGGGCATGGAGACGCTTCTGGAAGGAACACCGCAATGCTGCGCAGGGACAGCCCCAGGTCCAG
TTCAAACCTGTATTGGTTGGTGATGGTGGTACTGGAAAAACGACTTTCGTGAAACATCATTTGACTGGTGAATTT
GAGAAGAAGTATGTAGCCACCTTGGGTGTTGAGGTTTCATCCCTAGTGTCCATACCAACAGAGGACCTGTTAAG
TTCAATGTATGGGACACAGCCGGCTGGAGAAATTCAGTGGACTGAGAGATGGCTATTATATCCAAGCCAGAGT
ACCATCATAGTGTTTGTATGTAACATCGAGAGTTACTTACAAGAAATGTGCCTAACTGGCATAGAGATCTGGTATGA
GTGTGTGAAAAACACCCCACTGTGTTGAGTGGCAACAAAGTGGAATTAAGGACAGGAAAGTGAAGCGCAAATCC
ATTGTCTCCACCGAAAGAAGAAATCTTCAGTACTACGACATTTCTGCCAAAAGTAACTATAACTTTGAAAAAGCCC
TTCCTCTGGCTTGCTAGGAAGCTCATTGGAGACCCTAACCTTGGAAATTTGTTGCCATGCCGTCTCGCCCCACCA
GAAGTTGTCATGGACCCAGCTTTGGCAGCACAGTATGAGCAGCACTTAGAGGTTGCTCAGACAACCTGCTCTCCCG
GACGAGGATGATGACCTGTGGAATGAAGCTGGAGCCCGCGCTCAGAAGTCTAGTTTTATAGGCAGCTGTCCTGT
GATGTCAGTTGTGCAGCGTGTGTGCCACCTCATTATTATCTAGCTAAGCGGAACATGTGCTTCATCTGTGGGATG
CTGAAGGAGATGAGTGGGCTTCGCAGTGAATGTGGCAGTTCAAAAAATACCTTCATTGTTGGACCTGCATATTT
AGCTGTTTTGGAACACAGTTGATTCTTGGAGTTTCAAATATAGACTGCTACAGTCACATCACAATATTACGCGGT
GAAATCTTGTTGTTACTGTCTATTCCCATTCTTTTTCGTTTAGAATCAGAATAAAGTTGTATTTCAAATATCTAA

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FIGURE 2014

MAAQGGPQVQFKLVLVGDDGGTGKTTTFVKHHLTGFEKKYVATLGVEVHPLVFHTNRPVKFNVWDIAGLEKFSGL
RDGYYIQAQSTIIIVFDVTSRVTYKNVPNWHRDLVEVCENTPTVLSGNKVDIKDRKVKAKSIVFHRKKNLQYYDIS
AKSNYNFEKPFLLWLARKLIGDPNLEFVAMPALAPPEVMDPALAAQYEHDLVAQTALPDEDDDL

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FIGURE 2015

GGAGACGCTTCTGGAAGGAACACCGCAATGGCTGCGCAGGGACAGCCCCAGGTCCAGTTCAAACTTGTATTGGTT
GGTGATGGTGGTACTGGAAAAACGACTTTCGTGAAACATCATTGACTGGTGAATTTGAGAAGAAGTATGTAGCC
ACCTTGGGTGTTGAGGTTTCATCCCTAGTGTTCCATACCAACAGAGGACCTGTTAAGTTCAATGTATGGGACACA
GCCGGCCTGGAGAAATTCAGTGGACTGAGAGATGGCTATTATCCAGCCCAGAGTACCATCATAGTGTGTGAT
GTAACATCGAGAGTTACTTACAAGAATGTGCCTAACTGGCATAGAGATCTGGTATGAGTGTGTGAAAAACACCCCC
ACTGTGTTGAGTGGCAACAAAGTGGATATTAAGGACAGGAAAGTGAAGGCGAAATCCATTGTCTTCCACCCGAAAG
AAGAATCTTCAGTACTACGACATTTCTGCCAAAAGTAACATAACTTTGTTGTGCCATGCCTGCTCTCGCCCCA
CCAGAAGTTGTCATGGACCCAGCTTTGGCAGCACAGTATGAGCACGACTTAGAGGTGTCTCAGACAACTGCTCTC
CCGGACGAGGATGATGACCTGTGAGAAATGAAGCTGGAGCCAGCGTCAGAAGTCTAGTTTTATAGGCAGCTGTCC
TG TGA

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FIGURE 2016

CCCCAGACGCCGAGGATGGCCGTCATGGCGCCCCGAACCTCCTCCTGCTACTCTCGGGGGCCCTGGCCCTGACC
CAGACCTGGGGGGGCTCCCACCTCATGAGGTAITTTCTTCACATCCGTGTCCCGGCCCGGCCGCGGGAGCCCCGC
TTCAATCGCCGTGGGTACGTGGACGACACGCAGTTCTGTGCGGTTTCAGACGCGACGCCGCGAGCCAGAGGATGGAG
CCGCGGGCGCCGTGGATAGAGCAGGAGGGGCCGGATATTGGGACCAGGAGACACGGAAATGTGAAGGCCCACTCA
CAGACTGACCGAGTGGACCTGGGGACCTTGC CGGCTACTACAACAGAGCGAGGCCGGTTCTCACACCATCCAG
ATAATGTATGGCTGCGACGTGGGGTCGGACGGGGCGCTTCCTCCGCGGGTACCGGCAGGACGCCCTACGACGCCAAG
GATTACATCGCCCTGAACGAGGACCTGCGCTCTTTGACCGCGCGGACATGGCGGCTCAGATCACCAAGCGCAAG
TGGGAGGCGGCCCATGAGGCGGAGCAGTTGAGAGCCTACCTGGATGGCACGTGCGTGGAGTGGCTCCGCGAGATAC
CTGGAGAACGGGAAGGAGACGCTGCAGCGCACGGACCCCCCAAGACACATATGACCCACCAACCCCATCTCTGAC
CATGAGGCCACCTGAGGTGCTGGGCCCTGGGCTTCTACCTCGCGGAGATCACACTGACCTGGCAGCGGGATGGG
GAGGACCAGACCCAGGACACGGAGCTCGTGGAGACCAGCCCTGCAGGGGATGGAACCTTCAGAAAGTGGCGGCT
GTGGTGGTGCCCTCTGGAGAGGAGCAGAGATACACCTGCCATGTGCAGCATGAGGGTCTGCCCAAGCCCCCTCACC
CTGAGATGGGAGCTGTCTTCCAGCCACCATCCCCATCGTGGGCATCATTTGCTGGCCTGGTTCTCCTTGGAGCT
GTGATCACTGGAGCTGTGGTTCGCTGCCGTGATGTGGAGGAGGAAGGCTCAGATAGAAAAGGAGGGAGTTACACT
CAGGCTCGAAGCAGTGACAGTGCCCGAGGCTCTGATGTGTCCCTCAGAGCTTGTAAGGTGTGAGACAGCTGCCCT
GTGTGGGACTGAGAGGCAAGAGTTGTTCTGCCCCCTCCCTTTTGACTTGAAGAACCCCTGACTTTGTTTTCGAA
AGGCACCTGCATGTGTCGTGTTCTGTAGGCATAATGTGAGGAGGTGGGGAGACCACCCACCCCATGTCCAC
CATGACCCCTCTTCCCACGCTGACCTGTGCTCCCTCCCCAATCATCTTTCTGTTTCCAGAGAGGTGGGGCTGAGGT
GTCTCCATCTCTGTCTCAACTTCATGGTGCACGTGAGCTGTAACCTTCTTCTTCCCTATTAATAATTAGAACCTTAG
TATAAATTTACTTTCTCAAATTCCTGGCATGAGAGGTTGATGAGTTAATTAAGGAGAAGATTCCTAAAATTTGAG
GAGACAAAATAAATGGAAGCATGAGAAC

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FIGURE 2017

ATGGCGCCCCGAAGCCTCCTCCTGCTGCTCTCAGGGGCCCTGGCCCTGACCGATACTTGGGCGGGCTCCCACTCC
TTGAGGTATTTGACGACCGCTGTGTCGCGGCCCGGCCGCGGGAGCCCCGCTACATCGCCGTGGAGTACGTAGAC
GACACGCAATTCTGCGGTTGACACGCGACGCCGCGATTCCGAGGATGGAGCCGCGGGAGCCGTGGGTGGAGCAA
GAGGGGCCGCGAGTATTGGGAGTGGACCACAGGGTACGCCAAGGCCAACGCACAGACTGACCAGTGGCCCTGAGG
AACCTGCTCCGCCGCTACAAACGAGCGGAGGCTGGGTCTCACACCCCTCCAGGGAATGAATGGCTGCGACATGGGG
CCCCAGCGACGCCCTCTCCGCGGGTATCACCAGCAGCGGTACGACGGCAAGGATTACATCTCCCTGAACGAGGAC
CTGCGCTCCTGGACCGCGGCGGACACCGTGGCTCAGATCACCCAGCGCTTCTATGAGGCAGAGGAATATGCAGAG
GAGTTCAGGACCTACCTGGAGGGCGAGTGCTGGAGTTGCTCCGCAGATACTTGGAGAATGGGAAGGAGACGCTA
CAGCGCGCAGATCCTCCAAAGGCACACGTTGCCACCACCCCATCTCTGACCATGAGGCCACCCCTGAGGTGCTGG
GCCCTGGGCTTCTACCTGCGGAGATCACGCTGACCTGGCAGCGGGATGGGGAGGAACAGACCCAGGACACAGAG
CTTGTGGAGACCAGGCCCTGCAGGGGATGGAACTTCCAGAAGTGGGCCGCTGTGGTGGTGCCTTCTGGAGAGGAA
CAGAGATACACATGCCATGTGCAGCACGAGGGGCTGCCCCAGCCCCCTCATCCTGAGATGGGAGCAGTCTCCCCAG
CCCACCATCCCCATCGTGGGCATCGTTGCTGGCCTTGTTGTCTTGGAGCTGTGGTCACTGGAGCTGTGGTGCCT
GCTGTGATGTGGAGGAAGAAGAGCTCAGATAGAAACAGAGGGAGCTACTCTCAGGCTGCAGTCACTGACAGTGCC
CAGGGCTCTGGGGTGTCTCTCACAGCTAATAAAGTGTGAGACAGCTTCTTGTGTGGGACTGAGAAGCAAGATAT
CAATGTAGCAGAATTGCACTTGTGCCTCACGAACATACATAAAATTTTAAAAATAAAGAATAAA

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FIGURE 2018

MAPRSLLLLSGALALTDTWAGSHSLRYFSTAVSRPGRGEPRIYAVEYVDDTQFLRFSDAAIFRMEPREPWVEQ
EGFPQYNEWTTGYAKANAQTDRVALRNLRRYNQSEAGSHTLQGMNGCDMGPDGRLLRGYHQHAYDGKDYISLNE
LRSWTAADTVAQITQRFYEAEEYAEFFTYLEGECELELLRRYLENGKETLQRADPPKAHVAAHPISDHEATLRW
ALGFYPAEITLTWQRDGEETQDTVELVETRPAGDGTQKWAAVVVPFGEEQRYTCHVQHEGLPQLILRWEQSPQ
PTTIPVIGIVAGLVVLGAVVTGAVVAAMWRKKSSDRNRGSYSQAAVTDQAQSGVSLTANKV

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FIGURE 2019

GAGAGCAGCAGTGCGCGCACCCCTCTCCCTTGTCCACTGCTGCCGCTCCTTCTTCTGCCGCTCCTGGTGCTGC
TTGTGTGCTCGTTTGGAGCGGACCTGGTACCTCTTTTGTGAAGCGGCAGCTGAGGAGACTCCGGCGCTCGCCATG
GCCGAAGAAAAGCCCAAGGAAGGAGTCAAGACTGAGAACACGATCATATTAATTTGAAGGTGGCGGGGCAGGAT
GGTTCTGTGGTGCAAGTTAAGATTAAAGAGGCATACACCACTTAGTAACTAATGAAAGCCTATTGTGAACGACAG
GGATTGTCAATGAGGCAGATCAGATTCCGATTTCGACGGGCAACCAATGAAACAGACACCTGCACAGTTGGAAA
TGGAGGATGAAGATACAATTGATGTGTTCCAACAGCAGACGGGAGGTGTCTACTGAAAAGGGAACCTGCTTCTTT
ACTCCAGAAGCTCTGTTCTTTAAAGACCAAGATTACATTCTCAATTAGAAAAGTGCATTTGCTTCCACCATCC
TGACTACTACCGTATAGTTTCTCTATTCTTTTCATTTCCCTTCCCATTCCTTTACTGTACATAAAGTAACTG
GTATATGTGCACAAGCATATTACTTTTTTTTTTAAAACTAAACAGCCAATGGTATGTTTGTATGACATCAAGT
GGAGACGGGGCGGAAAAATACTGATCTGTGAAAAATACCCCTTTTCCATTAGTGGCATGCTCATTAGCTCTT
ATCTTTATATTCCAGTAAGTTATTTTGTCTCTCACTGTTTAAACAACAACAACAAAAACAACAACATAAAATC
CTTGATACCTTGTTCATTTGGAGAATTTAATGTTTTCAATTATCATTTGTAACCAAGGACAATTTTATAAC
TTTTTTGTACTTAGCTGTTACATGCAGAGCAATCTGCTTTAAGTAGGGATAAATTACTCTAAACAAAAAGAA
TCCTAGATAGTTTTCCCTTCAAGTCAAGCGTCTTGTGTTTAAATAAACTTCTGTTTAAAA

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FIGURE 2020

MAEEKPKEGVKTENNDHINKVAGQDGSVVQFKIKRHTPLSKLMKAYCERQGLSMRQIRFRFDGQPMKQTHLHSW
KWRMKIQLMCSNSRREVSTEGTCTFFPELCSLTKITFSIRKLQFASTTS

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FIGURE 2021

GCCGCTCCTGGTGCTGCTTGTGTGCTCGTTTGGAGCGGACCTGGTACCTCTTTTGTGAAGCGGCAGCTGAGGAGA
CTCCGGCGCTCGCCATGSCCGAAGAAAAGCCCAAGGAAGGAGTCAAGACTGAGAACAACGATCATATTAAATTGA
AGGTGCGGGGCAGGATGGTTCTGTGGTGCA GTTTAAGATTAAAGAGGCATACACCCTTAGTAAACTAATGAAAG
CCTATTGTGAACGACAGGGATTGTCAATGAGGCAGATCAGATTCCGATTGACGGGCAACCAATGAAACAGACAC
ACCTGCACAGTTGGAAATGGAGGATGAAGATACAATTGATGTGTTCCAACAGCAGACGGGAGGTGTCTACTGAAA
AGGGAACCTGCTTCTTTACTCCAGAACCTGTGTTCTTTAAAGACCAAGATTACATTCTCAATTAGTCTTTCATTTC
CCCCTTCCCAATTCCTTTACTGTACATTAAGTAACTGGTATATGTGCACAAGCATATT

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FIGURE 2022

MAEEKPKEGVKTENNNDHINLKVAGQDGSVVQFKIKRHTPLSKLMKAYCERQGLSMRQIRFRFDGQPMKQTHLSW
KWRMKIQLMCSNSRREVSTEKGTCTFTELCSTKTKITFSISLSFPSPFLYCT

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FIGURE 2023

ATGAAGGCCAACTACAGCGCAGAGGAGCGCTTTCTCCTGCTGGGTTTCTCCGACTGGCCTTCCCTGCAGCCGGTCTCTTCGCCCTTGTCCTCTGTGCTACCTCCTGACCTTGACGGGCAACTCGGCCTGGTGCTGCTGGCGGTGCGCGACCCGCGCTGCACACGCCCATGTACTACTTCTCTGCCACCTGGCCTTGGTAGACGGGGCTTCACTACTAGCGTGGTGCCCGCTGCTGGCCAACTGCGCGGACCAGCGCTCTGGCTGCCGCGCAGCCACTGCACGGCCCACTGTGCGCATCGTGGCTCTGGGTTCCGCCGAATGCGTCTCTGCGCGGTGATGGCTCTGGACCGCGGGCGCAGTGTGCCGCCCGCTGCGCTATGCGGGGCTCCTCTCCCCGCGCTATGTCGACGCTGGCCAGCGCTCTCTGGTGAAGTGGCCACCAACTCGGTTGCGCAAACCGCGCTCCTGGCTGAGCGGCCGCTGTGCGCGCCCCGCTGCTGGACCATTCATCTGTGAGCTGCCGGCGTTGCTCAAGCTGGCTGCGGAGGCGACGGAGACACTACCGAGAACAGATGTTGCGGCCCGCTGGTCACTCTGCTGCTGCGGTTTGCCGTATCCTGGCTCCTACGGTGCGGTGGCCCGAGCTGCTGTGTGATGCGGTTTACGCGAGGCCGGAGGAGGGCGGTGGGACGCTGTGGGTCCCACTGACAGCCGTCTGCGCTGTTCTACGGCTCGGCCATCTACCTACCTGACGCCGCGCAGCGCTACAACAGGCACGGGGCAAGTTCGTATCGCTCTTCTACACCGTGGTCACACCTGCTCTCAACCGCTCATCTACACCTCAGGAATAAGAAAGTGAAGGGGGCA

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FIGURE 2024

MEGTQEYDSSMQTVRFQGERRKSPSNATFSPPFFWMPHSAKSLVADAGIHSRNQHSYAIASFIKYSQLHFKSRESR
AGARDQPIIWKLKANYSAEERFLLLGFSWPSLQPVLFALVLLCYLLTLTGNSALVLLAVRDPRLHTPMYYFLCH
LALVDAGFTTSVVPPLLNLRGPAWLP RSHCTAQLCASLALGSAECVLLAVMALDRAAAVCRPLRYAGLVSPRL
CRTLASASWLSGLTNSVAQTALLAERPLCAPRLLDHFICELPALLKLACGGDGDTTENQMFAARVVILLPLFAVI
LASYGAVARAVCCMRFSGGRRRAVGTCGSHLTAVCLFYGSAITYYLQPAQRYNQARGKFVSLFYTVVTPALNPLI
YTLRNKKVKGAARRLLRS LGRGAGQ

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FIGURE 2025

ATGGGGAGAAGGTATGTGAGGAAGGAAAGAAAAAGGCCAGCAGGTGAAGAAAAAGAAGGTCTGGTGAGGACA
ATGGAGACGGCCAATCGTTCCTTAAACGGTCTCCTCCTCTGGTTCCCTCTCTCCAAGATGGCAAGGGAGCCTGC
AAATTCGGTCTCCAAGGATCCCTCTGCCAGAGCAACGAACCTCCCTTTGGCAATATAGGAATAATCTTCATTCTC
CCTGCAATTGTGCACATTAATAGGCTGTTTAATGAAAGTACAGTGTGGAGCTCATTATTGCGAACAGCAGCCCTT
AGAGATCGTAGCTGGCTGGTAAAGGCGGCTTTAGAGCGGACGCCAGGCTTCTTCATCAGCTTACCAGAAGGTTG
GAGGCAGAAGACCTCCATTTCAGATTCACTCATTCTCGGCTTATGCTTCCGTTCTTTGAAAGTGAACCACTA
GGTTTCAGAAAGCACCAGGCAGTTAAACAGAGTTTACTCCCTCGGTCACTGCAC TAGAAATCAGGAGGCGGAACA
CTGTACCTAAACATAAAACGACATTCTCAAAAACCTGCCCTGCACAGGCTTGTTGGGACTTCACGATCCTTCTTGG
ACCTGCATCCCCCTCTTCTCTGGTACTCGGACCAAAATCGAACAAATCAAGCAACAAAGTTGGCCTTAAAAATTGAG
GCCCCAGAGATGAGGTTACTGAGCGGGTATATGTCACAGAGCCAACTTTCTGCAATGAATTGGAAGAACATC
AAGACAGAGGGAGGAGCGCTGGGGGTGAACACCGCCTTGACCTTTGTAACTGCTGCACAAATAAGGAGTGGTTG
CTGTGCCAGTTTTCCCTGAAGAGGTGCCTGACAGCTGGCTCTGTGAATTCGAATACAGTTTTCAGGCAGGCTCT
GGGAGAGTTTTTGGGAATCCCGAAAGACAGCCAGAGATGCTGGACTGCGAATGCAGGCGCGCTCAGGCGAGGC
TGGGAGGGCCCGCAGGAGCGCTCGGGGTATCGGGAGACACGCAGAGGGAGGGGCAGGCGGCGGCTCCGCTTCTT
CGCGTCTGGCTCTGAAAGCAACACAGGCAGCGGGGCGGTGCTAGAAAAACACAACCTTCACGGAAGAGTTTT
GAAAAGATTTCCGGCAAGAAAAATAATGTTACCAGAGACCGTTGAGGCCCGGCGCAGCCTTCAAGATGGATGCCCTT
GCTGGCGCAAAAGTGGGTCTCATTGCTCCCGCGGACTGGACGCTTCCGGGGAACGAAGACTGTGCAGGAGAAA
GAGAGCTAG

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FIGURE 2026

MGRYVRKERKRPAGEEKEGLVRTMETANRSLKRSPPPGSSLQDGKGACKFGLQGS LCPEQRTPF GNIGIIFIL
PAIVHINRLFNESTVWSSLLRTAALRDRSWLVKAALERTPRLLHQLTRRLEAEDLPFADSLISPLMLPFFESEPL
GFRKHQAVKTEFTPSVTALEIRRTLYLNKRHSQKL PCTGLLGLHDP SWTCIPLFSGTRTKIEQSSNKVGLKIE
APEMRLLSGYMSQSQTFCNELEKNIKTEGGALGVNTALTFTVTCCTNKEWLLCQFSLKRCLTSWLCEFEYSFQAGS
GRVLGNPERQPRDAGLRMQARCRRGWEGRQERC GYRETRRGRRRAPLLRVLALKATTGQRGGARKTQPSRKSF
EKISGKKIMLPETVEARPAFKMDAPAGRKVGLIAPRRTGRLRGRTKVQEKES

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FIGURE 2027

TACGGCCGTCGTCGCCGTCGTCAGTCAACATGAGGAGCAGAGGAATCGGAGAAGGCCCAACGGAGCAAGAGCC
GCTGGAAGGGACAGAACAGACACTAGATGCGGAGGAGGAGCAGGAGGAATCCGAAGAAGCGGCCCTGTGGCAGCAA
GAAGCGGGTAGTGCCAGGTATTGTGTACTCTGGGCCATATCCCGCCGCGCTTCGGGCCCTGCACGTCCGCAACCT
TCTCAGCGCTATGGCAGAGTCGGACCGCTCTCTTTCAGGCTGAGGACCGGTTTCGTGAGACGCAAGAGAAGGC
AGCAGCAGCTGCCGGAGGAAAAAGCGGTCTACACCAAGGACTACACCGAGGGATGGGTGGAGTTCCGTGACAA
GGCGATAGCCAAGCGCGTGGCGGCCAGTCTACACAACACGCTATGGGTGCCCGCAGGCGCAGCCCCCTCCGTTA
TGATCTTTGGAACCTCAAGTACTGACCCGTTTCACTGGTCCCACCTCAGCAGGACCTCGCCCTTGAGCGCCA
GGTGCAGGCGAGCGCTTGAGAGCGGAGGTTGCTCAAGCCAAGCGTGAGACCGACTTCTATCTTCAAAGTGTGA
ACGGGGACAACGCTTTCTTGGGCCGATGGGGACCTGCTCGCCAGATGGCTCTGGACATTTCGCCAGCGTCC
TACTGAGCAGGAAGTGGGGCCCGTAAAGCAGCACGGCCAGGGGGACGTGAACGGGCTCGCCTGGCAACTGCCCA
GGACAAGGCCCGCTCCAAACAAGGGCTCTTGGCCAGGATCTTTGGAGCCCCGCCACCTCAGAGAGCATGGAGGG
ACCTTCCCTTGTGAGGACTCTCGAGGGGCTGGGTGGCCCTTCCATTTCCTGGCCCTGCTCTGCTTCTGTCTA
CCTCATACTAGAAATGATCGTACTACCCGGGCAGACATTTTACTGTGTTTCTCAGACCAAGTGCTACTGATGGC
CCAACATGGAGTTTTGTGGGCTTCCACTGTCCCACTCCGAACCTCTGTATGTGCTGGCTGAGTCACCTAATT
CATACTGTCTACTAGCATAATTATGACTATTGCATATGCTTGTGTTTGTGTTGACTCTTGGCTGCCTACGCTGTGA
GGGTCCCTTGAAAATCCCACTTCTGCCCCAGAAAGGGCCITTAATTCCAACTAGGAGGATAATGCCCTAGTCCA
GGCAATCTTTCTCTGTTTAGCAGTCACAGGTGAGGGTGGTATTAGCATCTTTTATGTAGAAAAAATTAGTITA
ATGGGGTGGACTGGGTGGGAAGAAATACATTTCCATAATGTATTTATAGAAAAATAAAATATTTTATGTGCGCTT
TTTATTTTTTGTGGTGGGAGGTCATTGGACAAGTTCCAACITTCATCTTGTGTTCCCTTCACCTTCATATCTGT
ATCTTAGAGCCCCCTCCCTGCCACCCACCTTACTGTTTAACTCGATTTTTTTTTCTATTTAATTTTGTCT
AATATCTTAGCCAGTTTATCAATCAGTTATCTTAAGTCAGCAATTTCTAAGCCATTGTTTGGAGAAACAGTGAC
AATAGGTAATAACACATCTTAGTATTAAGAGTTTTACAGCCACTAGTATAAGATAGGCAATCGTGTAGATGCAT
ATAAAGGGTGAATGGGAGCCATGGCAGGTATAGAGTCCCTCAATGGGAACCTGATTGATGATCACAGTCTTC
AGTGTGAGTGCTCCCACAATTACAAAGATGCTTCTGGGTGGAGTGTGAGTTGGAACCATTTGAAAGGTGGG
CAAAGCCTAGTAGAGAACCAGTGCACCTCAGGTGCACCTTACATATGGTGGGCTGAGGCAAGCAGCCCCGTAGG
CTTCAAAGAATCAGTGTAGCCCACTAAAGGAAGTGAACCTAGGTGTCAATAAAGAGTCTACACAGTCTCA
CGTAGACCAAAATCTGATCATTTCCAGGCTGTGTCATGAAGTATAGAGTATGATTATAATTTCTGTTGCTT
GTGCTGTTTGTGTTTTTTCATCTGTCAATGTGATGATCTGTGTTTTATAGGGTAGAGTGGATTTGTCTACTT
TGGCTGTAAAATACCTTAATCACATTATGATCTTGACAGGTGCACCTTACTGGGAGATAAAAAGGACCATACG
GTAAA

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FIGURE 2028

MEAESEKAATEQEPLLEGTEQTLDAEEQEESSEEAACGSKKRVVPGIVYLGHIPPRFRPLHVRNLLSAYGEVGRV
FFQAEDRFVRRKKAAAAAGGKKRSYTKDYTEGWVEFRDKRIAKRVAASLHNTPMGARRRSPPFRYDLWNLKYLHR
FTWSHLSEHLAFERQVRRQRLRAEVAQAKRETD FYLQSVRGQRFLAADGD PARPDGSWTF AQRPT EQELRARKA
ARPGGRERARLATAQDKARSNKGLLARIFGAPPPSESMEGPSLVRDS

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FIGURE 2029

ATTTCCTTTCTTTTTCTTTCTTCCGGATGAGAGGCTAAGCCATAATAGAAAGATGGAGAATTATTGATTGA
CCGTCTTTATTCTGTGGGCTCTGATTCTCCAATGGGAATACCAAGGGATGGTTTTCCATACTGGAACCCAAAGGT
AAAGACACTCAAGGACAGACATTTTTGGCAGAGCATAGATGAAAAATGGCAAGTTCCCTGGCTTTCTTTCTGCTCA
ACTTTTCATGTCTCCCTCCTCTTGGTCCAGCTGCTCACTCCTTGCTCAGCTCAGTTTCTGTGCTTGGACCTCTCG
GGCCCATCTCTGCCATGGTGGGTGAAGACGCTGATCTGCCCTGTCACCTGTTCCCGACCATGAGTCGAGAGACCA
TGGAGCTGAAGTGGGTAAATTCCAGCCTAAGGCAGTGGTGAACGTGTATGCAGATGGAAAGGAAGTGGAAAGACA
GGCAGAGTGCACCGTATCGAGGGAGAACTTCGATTCTGCGGGATGGCATCACTGCAGGGAAGGCTGCTCTCCGAA
TACACAACGTCACAGCCTCTGACAGTGGAAAGTACTTGTGTTATTTCCAAGATGGTGACTTCTATGAAAAAGCCC
TGGTGGAGCTGAAGTTGCAGCACTGGGTTCTAATCTTCACGTCGAAGTGAAGGGTTATGAGGATGGAGGGATCC
ATCTGGAGTGCAGGTCCACCGGCTGGTACCCCCAACCCCAATAACAGTGGAGCAACGCCAAGGGAGAGAACATCC
CAGCTGTGGAAGCACCTGTGGTTGCAGATGGAGTGGGCTTATATGAAGTAGCAGCATCTGTGATCATGAGAGCG
GCTCCGGGAGGGTGATCTCGCATCATCAGAAAATTCCTCCTCGGCTGGAAGACAGCCAGCATTTCCATCG
CAGACCCCTTCTTCAGGAGCGCCAGCCCTGGATCGCAGCCCTGGCAGGGACCTGCCTATCTTGCTGCTGCTTC
TCGCGGAGCCAGTTACTTCTTGTGGAGACAACAGAAAGAAATAACTGCTCTGTCCAGTGAGATAGAAAGTGAGC
AAGAGATGAAAGAAATGGGATATGCTGCAACAGAGCGGGAATAAGCCTAAGAGAGAGCCTCCAGGAGGAATCA
AGAGGAAAAAATCCAGTACTTGACTCGTGGAGAGGAGTCTTCGTCGATACCAATAAGTCAGCCTGATGCTCTAA
TGGAAAAATGGCCCTTTCAGCCTGGTGAGGAAATGCTTCAGATGAGGCTCCACCTTGTTAAATAAATTGGATG
TATGAAAAATAGACTGCAGAAAAGGGGAACCTATTAGCTCACGAGTGGTCAGTGAAGATTGAAATTAACTT
CTGAGGGCCAGCAGCAGCTCATGCCCTGTAATCCTAGCACTTTGGAAGGCTGAGGAGGGCGGATCACAAGGTCA
GGAGATCAAGACCATCTTGCTTAACACGGTGAACCCGCTCTACTAATAAATAACAAAAATAAATAATAGCCG
GGCATGGTGACGGGCACCTGTAGTCCAGCTACTCGGAGGCTGAGGCAGGAGATGGCATGAACCCGGAAAGGCA
GAGCTTGAGTGAGCCGAGATCACGCCACTGCACTCCAGCTGGGAGACAGAGCGAGACTCTGTCTCAAGAAAAA
AAAAAAAAAAAAAAAA

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FIGURE 2030

MKMASSLAFLLLNFHVSLLLVLQLLTPCSAQFSVLGFSGPILAMVGEDADLPCHLFPTMSAETMELKQWSSSLRQV
VNVYADGKEVEDRQSAPYRGRISILRDGITAGKAALRIHNVTASDSGKYLICYFQDGDIFYEKALVELKVAALGSNL
HVEVKGYEDGGIHLECRSTGWYPQPQIQWSNAKGENIPAVEAPVVADGVGLYEVAASVIMRGGSGEGVSCIIRNS
LLGLEKTASISIAIDFFRSAPQWIAALAGTLPILLLLLAGASYFLWRQQKEITALSSEIESEQEMKEMGYAATER
EISLRESLQEELKRKKSST

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FIGURE 2031

ATGGACAGGACTGTCAATTCAGAAATACCACTGTGAATGGCCACAGCTGTGAAGTTAGGAAAGCCCTGTCAAAG
CAAGAGATGGTTAGTGTTCATCCAGCCAAAGAGGTCGAAGTGGTTCTGGAAACITTTGCTGGTGGTCTTAGAAGT
GGTTTCAGTGGGAATAACAACITTTGGTCGTGGAGGAAACTTCCGTGGTCGTGGGGCCITTTGGTGGCAGCCGTGGT
GGTGGTGGATATGATGGCAGTGGGGATGGCTATAATGGATATGGCCAGATAAACAGTCTCCACTTGTTCAGGAC
TTCAACGGAGATATCCCACTCAGTCCGTGCTTATGCCAGACACCTTGCACGAGCCCTCTCCCAAGATAGCTAGGACT
CAGGGAACTGCAGGCTGACACAAGCATTGATGATCTATATTAATGCAAGTGAATATGGAATGGAGAATTTTAA
CAATGGTGTCAATACCAGCCATTAAATGCCATAGCTTTAATTTGTTCAATTAAGTTTAGCAGCCAGTTACCTAACAA
GGTCATCAAAGGAGGGACACAGAAGAGGCCAAGCACTGATAATGAAAGGTCTATATCAGAGTGTGCTCAGAAAAG
GCAAGCAGAGATCACAGTTTTCCAGGGCTGCCAGCAGAATGGATTTAATATTGCCACGTGGGAAGAAGAAAAAGCC
ACAGGGTGCAGATATCAGGAATCTGAATTTCCGGGGCATAACGTGTGCACAGATGCAGCTTCAACAGATTATCA
TATCATCCCTTCAGAGCTGTGTGACAGTTTACACCAGATTAACTCTCAGTTTCCAGAAAAAGAGGAACTCTG
GCCTAG

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FIGURE 2032

TTCCCCGACATTGAGAAACTCCTCTCTACTTTAGCACGGTCTCCAGACTCAGCCGAGAGACAGCAAACCTGCAGC
GGCGTGAGAGAGCGAGAGAGAGGGAGAGAGAGACTCTCCAGCCTGGGAACATAACTCCTCTGCGAGAGGGCGGAG
AACTCCTTCCCCAAATCTTTTGGGACTTTTCTCTCTTTACCCACTTCGCCCCCTGCGAGGAGTTGAGGGGCCAG
TTCCGCGCGCGCGCGCGCTTCCCGCTTCGGCGTGTGCTTGCGCCGGGGAACCGGAGGGGCCCGCGCATCGCGCGG
CGGCGCGCGCGAGGGTGTGAGCGCGCGTGGCGCCCCGCCGAGCCGAGGCCATGTCGAGCAAAACCAACATGCGG
AGAACACGGAAAGCGCTGCTGGCGCGCGAGAGCTCGGACTCGGGCGCCGGCCTCGAGCTGGGAATCGCCTCCTCCC
CCACGCCCGGCTCCACGCCCTCCACGGCGCGCAAGGCCGAGACCCGAGCTGGTGAAGACCCCGAGTGGGCACA
TCAAGCGACCCATGAACGCCTTCATGGTGTGGTCGCAGATCGAGCGGCGCAAGATCATGGAGCAGTCGCCGCACA
TGCACAACGCCGAGATCTCCAAGCGGCTGGGCAACGCTGGAAGTGTCTCAAAGACAGCGACAAGATCCCTTTCA
TTCGAGAGGGCGAGCGGCTGCGCCTCAAGCACATGGCTGACTACCCGACTACAAGTACCGGCCACGGAAGAAGG
TGAAGTCCGGCAACGCCAACTCCAGCTCCTCGGCCCGCGCCTCCTCCAAGCCGGGGAGAGGAGACAAGGTCG
GTGGCAGTGGCGGGGCGGCCATGGGGGCGGCGCGCGCGGAGCAGCAACCGGGGGGAGGAGGCGCGCGTG
CGAGTGGCGGCGGCCAACTCCAACCGGCGCAGAAAAAGAGCTGCGGCTCCAAGTGGCGGGGCGCGCGGGCG
GTGGGGTTAGCAAACCGCAGCCAAGCTCATCTGGCAGGCGCGGCGCGGGCGGAAAGCAGCGGCTGCCGCGG
CCGCCTCCTTCGCGCGCAACAGCGGGGGCGCGCGCCTGCTGCCCTGGGCGCGCGCGCCGACCACTCCTCGC
TGTACAAGGCGCGGACTCCAGCGCCTCGGCTCCGCTCCTCGGCAGCTTCGGCTCCGCGAGCGCTCGCGGCC
CGGGCAAGCACTTGGCGGAGAAGAAGTGAAGCGCGTCTACCTGTTCCGCGGCTGGGCACGTCTGTCGTCGCCG
TGGCGGCGTGGGCGGGGAGCGACCCAGCGACCCCTGGGCTGTACGAGGAGGAGGGCGCGGGCTGCTCGC
CCGACGCGCCAGCCTGAGCGGGCGCAGCAGCGCGCCTCGTCCCCCGCGCGCGCGCTCGCCCGCGACACC
CGCGCTACGCCAGCTCGCGCGCGCTCGCCCGCCCGTCCAGCGCGCCTCGCACGCTCTCTCGGCTCGT
CCCCTCTCTCTTCTCTCTCTCGGGCTCCTCGTCTCCGACGACGAGTTCCAAGCAGCTCTGCTGACCTGTA
ACCCAGCTCAAACCTTTGAGAGCATGTCCCTGGGCAGCTTCAGTTCGTGTCGCGGCTCGACCGGGACCTGGATT
TTAACTTCGAGCCCGGCTCCGGCTCGCACTTCGAGTTCGGGACTACTGCACGCCGAGGTGAGCGAGATGATCT
CGGGAGACTGGGCTCGAGTCCAGCATCTCCAACCTGGTTTTCACTACTGAAGGGCGCGAGCGAGGAGAAGGGC
CGGGGGGGTAGGAGAGGAGAAAAAAAGTGA AAAAAGAAACGAAAAGGACAGACGAGAGATTAAAGAGAAA
AGGAAAAAAAGAAAGAAAAAGTAAGCAGGCTCGTTCCGCCCGTTCCTGCTGTCGGATCAAGGAGCGCGCGCG
GTTTTGGACCCGCGCTCCCATCCCCACCTTCCCGGCGGGGACCCACTTCGCCAGCCGGAGGAGCGGGAGG
AGGAAGAGGGTAGACAGGGGCGACCTGTGATTGTTGTTATGATGTTGTTGTTGATGGCAAAAAAAAGCGAC
TTCGAGTTTGCTCCCTTTGCTTGAAGAGACCCCTCCCTCTCCAACGAGCTTCGGACTTGTCTGCACCCCA
GCAAGAGGCGAGTTAGTTTTCTAGAGACTGAAGGAGTCTCCCTCTCTCGCATCACACCTTGGTTTTGTTTT
ATTTTGCTTTTGGTCAAGAAAGGAGGGGAGAACCAGCGCACCCCTCCCCCTTTTTTAAACGGCGTGATGAA
GACAGAAGCTCCGGGTGACGAATTTGGCCGATGGCAGATGTTTTGGGGGACCGCGGACTGAGAGACTCCAC
CGAGGCGAATTCGGTTTGGGGCCTTTTTTCTCCCTCTTTTCCCTTGCCTTCGAGCTGCGAGGAGGAGA
TGTGTAGGGGAGGAGCCAGCCAGTCAGTGACCGGCGCTAGGAAATGACCCGAGAACCCGTTGGAAGCGCAGGAC
GGGAGCTAGGGGCGGGGCGGAGGAGACACGAACGTGAAGGGGGTTACGGTCAAACCTGAAATGGATTTCGACG
TTGGGAGCTGGCGGCGCGGCTGCTGGGCTCCGCTCTTTTCTACGTGAAATCAGTGAGGTGAGACTTCCCA
GACCCCGAGGCGTGGAGGAGAGAGACTGTTTGATGTGGTACAGGGGCGAGTCACTGAGGGCGAGTGGTTTCGG
AAAAAAGG

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FIGURE 2033

MVQQTNNANTEALLAGESSDSGAGLELGIASSPTPGSTASTGGKADDPWCKTPSGHIKRPMAFMVWSQIERR
KIMEQSPDMHNAEISKRLGKRWLLKDSKIPFIREAERLRLKHMADYPDYKYRPRKKVKSNGANSSSSAAASSK
PGEKGDKVGGSGGGGHGGGGGGSSNAGGGGGGASGGGANSKPAQKKSCGSKVAGGAGGGVSKPHAKLI LAGGGG
GGKAAAAAASFAAEQAGAAALLPLGAAADHHSLYKARTPSASASASSAASASAAAPGKHLAEKKVKRVYLF
GLGTSSSPVGGVGAGADPSDPLGLYEEEGAGCSPDAPSLSGRSSAASSPAAGRSPADHRGYASLRAASPAPSSAP
SHASSASSHSSSSSSSGSSSSDDEFEDDLLDLNPSNFESMSLGSFSSSSALDRDLDFNFEFGSGSHFEFPDYC
TPEVSEMISGDWLESSISNLVFTY

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GCGCCGCGGCGCGCGCGAAATCGCGGGTTTCACAGCATGTCGCGCTCGGCCCTGCTGCGGAGGAGGGGAGGGAACCCCC
 ACCCAGCCGCGCTCGGAGAAAGAACCCGAAATGCCCGCTCCACAGAGGAGGAGCGAGGAGGAAGGACGAGGAGC
 GACGAGGAGGAGGAGGAGGAGGAGAAAGAAAGATGCTCTCGTGGAGGCAAGAGGAGAAAGAAAGAAATGATAG
 AGGTTGACAATCGCAAGTCTCTCTCTTCTACAGAGAGCACTTAAATCATGCACAGGAAAGGGGCGAAACATTTGT
 GAAATGGAGGAGATACATTTTTTCTAGTAAAGAANAACCATGAACTTAGAAATCTACACAAATGCTCTTAC
 AACAGGCCAGGCACTGTCTCTCTATTAAGAAAGAAATGTGGTCAGTTTCAGTGGCTTTCCATTTGAAAAAGGAAGT
 GTCCAATATAAAAAAGGAGGAAGAAATGTGAAAAAATTTAGAAATGCCGATTTAAAGAGCATCTGTAGGTTCTTT
 GATTTGGAGAGATCAGGTTGTAATATGTGAACATGTGAAGAGGATCTTGAATTTCTTAATGCATCCAGAGCCTCT
 GGAAGACCAATTCGCCAAATCTAAAAAATCTGTAGCAAGGATGTAAGAAAGCAAGCGAAGCAAGCTTTGGAATGGCA
 AGGAAAGCTAAGCGAACCAAGTTCTGAAATTTCTGTCAAGTAACTTAGTAGTGATGAAGATGAAAGAAAAC
 AAGGAAGAGTCTTCAGATGATGAAGATATAAGAAAGTGAAGAGGAGGCCACCAAAAAAGCAGCCAAAAGAGAAAAA
 CCTAAAGCAGAAAGTACTTTCAAAGTAAAAAATCTGTGAAAAGTCCGAATTTTAAAGAACAGATACGACGCC
 ACCAAGAAAGATCAAAACAGTCCAAAAAGGAAGTGAGTCTGAGGATAGTTCAGATGATGAACCTTTAAATATAA
 AAGTTGAAGAAACCCCTCAGAGTGAAGAGTTAAAGGAAACAAATAAGAAATTTAGTGGCCATCTGTCAACTTTGGA
 GAAGTCAAAATGAACAGAGTTGCAAAAAGTCTGAAAAATTTCTCAATTTATGATTTTAATCGAAAAAAGAT
 TTCATAAAAAACAATCTGAAGAAGCTAATTTTCTGAGATAGAGGACAGAGAAGATGACTCGTTCCCATAGATTTG
 AAGATCTGATTTATACCAATATACACAGCAAGAGAATGATTTCCTTTCTTAATCGCTTTGAAGCAACGTTAGT
 AGAACTTACTGCTGACCTTTTATCTTGAGTTGTATGTGAATTTGAGTTTGGCTTTTAAATGTGATTTCTATGC
 CATTTTATGTTTTAAATCTTGCATGGCATAATTTGTTCTCTGCTTTTATAGTTGTAATTTGTACATTTTGGATT
 CTTTATAAGGTCATAGATCTTGAGCTGTGTGGTTTTATGTGCACTTAATATAGTGTGCTTGAAGGCATACT
 TTTAATCAAGTAGAACAAAAAATCTATACACAGGATTTATACATACAGAGATGTAGATTTAGTATATGAAT
 ATTTTGAATACAGATCTCTGCTCAGTGTGAAAAATTCAGCGGCAGTATGTGCATCATATAAAAAATATACAGCT
 AGTTGTCAGATCACTGAATGGAACTTTCTCTCGCATGTGATATGTCATAAATGTGCAGCATGACAAAGTG
 ACAGATGTTATTTXGATTTTTTAAAAAACAAATGGTTGTATATAAAGTTTTTTTATTCTTTTGTGACAGTCA
 TTTTAAATCTCACATAGATGTGATCTTTATAGTTGTAGACTATGGAATGTCAAGTTCTGAGCCAAACAGATGAT
 GBAACAGTGAAGTCAATTCAGTGAATGACCACTGAAGGAACAGTACCTCGTTGCTCGAAAGTGTCATA
 ATTTGTAAITTTAGTATTAACCTGTGAAGAAGTGTCTGATAGGATCTTTATATATATAGGACAGCAAAAAAT
 CAACCTCAAAAGCTCAAAAATTTGGGAAGGGGTGGGATTAAGTACAAGCAATTTGGCTTACAGATTAATGA
 CTGATTTTTTAACTGCTTTTGCCCATATAAAATGCTGATATTTCACTGGAACCTTAGCCAGCTTCCAGATATG
 ACTAAAGTACAGAGTATATATGCGCAGATATATGTGCGAGCCATCTGTTGATGCTTCACAAAGGTGCTCTCAA
 AATAAATATCTTTACATATAAGAAATTTAATGTCTCTGGAGTTGGGGCTCTGGCTTTTCAGAGTTTGGTTA
 ATCAGTGTGATCTCAGATGATCAACATAATGGACCACCTCTGAATGAGACTAATTTTGTCTTCAAAITTA
 GCTTAAATCAGTTTATTAATCTGAATTTTAAACATGCTGTTTTATGACAAATGACACATTTGTTGACCAAT
 TAAGTGTGAAAAAATATCTTGCATCATGACAGCAAAATATATAAAATATATGTTGAATGTTAACAGGTATTT
 CACAGGTTGTTCTTGTGATGTTACTCAGACACTAGGGGAAGGTAATAACAGTGAACCAATAAGCAACTAAAT
 GAGACCTAATAATTTGGCCTTCGATTTTTAAATATTTGTTTAAATCTCTGTAATAAACCTTGCAATAAAATTAATCTAAATCA

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FIGURE 2035

MSASAPAAEGEGTPTQPASEKEPEMPGPREESEEEEEDEDEEEEEEEKEKSLIVEGKREKKKVERLTMQVSSLQR
EPFTIAQGGQKLCEIERIHFFLSKKKTDELRLNLHKLLYNRPGTVSSLKKNVGQFSGFPFEKGSVQYKKKEEMLK
KFRNAMLKSI CEVLDLERSGVNSELVKRILNFLMHPKPSGKPLPKSKKTC SKGSKKERNSSGMARKAKRTKCPEI
LSDSSSDEDEKKNKESSDDEKSEEEPPKKTAKREKPKQKATSKSKKSVKSANVKKAD SSTTKKNQNSSKKE
SESEDSSDDEPLIKLKKPPTDEELKETIKKLLASANLEEVIMKQICKKVIENYPTYDLTERKDFIKTTVKELIS

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FIGURE 2036A

GGGGGAGGGAACGGAGCAGTGACAGGTTATCCAGAGGGTGCTGCTGAGGCGACGATGGCCGAGGGGGCCGAGGA
AGCCCGAGGCCACCCCTCCCGGGCAGGACGATGGCGGAGGGGACACGAGGCCGTCCCTTCCTTGAGAGGCCCTCC
GACCCGCGCCGTCCATGCCCCCGGACGACGCCCGGACCCGAGGCCGAAACCCGAGGCCCGGGCCGAGCCCGGG
CCTCGCGGCTGCCCGCCGAGCCGACAAATTTGGAGCCGCCGCGCAGCTCAGGAAGCGCGGGAGGCGGCCTCCGG
CTCCGGTGACAGCTGCGAGGAGCAGGCGGGCTGCGAGGCGCCCGAAGCCGCGGCCACGAGAGAGACAGCTCG
GCTGAGCGCCCGGGAGTACTCCGGCAAGTGCGAGCTGGCTGTGGCAGTCCCTATGCGCGCTACCTCACCTGGCA
CAGCGGCTTGCCGCGCTTCCAGCCTACTGCGAGCCCGAGCCCTCCCGCAGAGCTTCCCTTCGGGCGGCGCTCG
AGTCCCCGAGGCGCGGCGCCGCCGCCCGCCGAGCTGGGTATTACACCCCTTCTACTTCTGAGCCCGGGGC
CGCGGGGCTGACC CGCGGACAGCTGCCGGCATCAGCACCCCTGCTCCAGTGC GCGGGCTGGGACCCCGGCTCC
TCACGTGCGAGCGTCCGGTCCGGGCCACTCCAGTGACGAGGGTAGGATCCGAGCCCTTCGCGAAGCCCGAGCGA
GACCGGCGCAGAGGACGAGCAGAAATGTTATTTCCATCCTTGCCCGCAGATTTATGGCAGAGATGGTGATT
CTTTATTCTCTTTTATAAAAGCAACCATTTGCTTAAAGCATTATGCACCTCAGTGGGATAAAGGATATCTCTAA
GTTTGCTATGCATTATATAAAGAAGAAATAGATGAAGACACATCAATGGAAGACTTGCAGAAAATGATGGTTGT
GGCACTTATATACAGATTATTAGTTTGTCTTATGAGATAATTTGCATTG GGGAGCAGGTGGAGCTACCCAGG
GAAGTTCTGCTGGGCTTCGAGTTGTGCATGTGATACATCAGTGCTTATTGCAACCAAGTCGGGTTTTAGTGAT
TCCTTCCAAATGTTAGCATTTACAACGTCCACTATCCGAGCTTTGATCAAGAAATTTTCAATGCTCTTTTTT
CCCTGCTTTCACACATGCTGTTTTTTCAGCATAATCGAACAGCTTATGACATTGTAGCAGGAACCATTTGGT
AAAAAGAAATGGGCTCAGATGACTGACCTCCCAAAACCCCTGATTTCACACACTAAGACTAAATGTATCAAGGC
CATCAGTATCCCTGGGTTACATCAATTTGATGATTTAGAAATTAAGCAGTCACTCAGGTGATGCGAGTGACTA
CTCTGAAAGTATTGATTATCTTGAATGCCAAAGAACTTGTCCAGAAGAAAACCTGTTAAATCAAGATTAA
ATTTTATGATCAAAAGGCAATGATTTTATAAACATGGACAATATATACCTTTCTTAAGATCTAAGGACTTTC
TTAAGATCTAAGAAATTTGCTGAAAGCATTTCAGCTTTGAAATCTCCAAATGAACCTTTAAATTTATTTTGGTT
TATCCCAAAATTAAGGAAATGTCAGTTGTGTTTTGTAAACACCTATGTAACATCATCTTTAGTTTACACTTCC
TGGGGAATTTGCTTTTGGTGTTAGAGGAGGGAATGAGAACACAAATTTGGATAATCCACTGTCTCCCATCCGAG
AGGTGGTGAGTTGGCTACAAGAAAGGACAAAGTAGGCGAGGCTAGCAGTTCCCTTACCTGAAGTTTCAAAT
CCATCTGCAGTTCCCTCTCGTAATGATGTAACCTTACAACTATTCTTAATGCTTGAACATGTAATTTAGGCGCA
GTTTCTCATGATGATGAAAAAGTATCAAGTCATATTGCTATGTTAATTTGGTTTTTTTTTTTAAAGGTAAGTTAG
TGATTACTGTTAATGGTGGGGAGTAAGTTTTCAGTGTAAATGAACTTATAAATTTATGTGCAAGTGTGTTTCAGT
GCCCTGAATCAACATAAATGTGGGAGAAATCACCCTCCATCAACAGCTTGCAATTTACTGTAAAGATTCC
CAGTATGTGTGCGAGCATGAAGAAATATTAGTGCTTCTCAGTGTTCTCAGTGTAATTTCTATTATATACAGCAT
ATTCACATACTACTTTCCCTTATTTTATATAGTCTCTAGCTGTGAACACTCAAGGAGTTAAAAAATCTTTAA
TATTTTCATGATTAACCTAAGTACTATTAATTAATAGCTTGCAGAAATATTAGCAATTTTCCCATTTAGGACTATT
CTCTCTAAGACAGAGAGACTAGCATCCAGACATCATTTCTAGGGTCTTTAAGCTCATTTTGGGTCTGCTAAG
TTTGGGGGAAATGTACGCAAAAGTGACTGTGATGTGCGATTGTGCTTTTCTGTTTGAAGCAAAAT
GTGGGGTTTTATTATGTGTGTGTGCTTTTCTAGATGTCAGTGTAGCTGTGCTGAGATATACCTGTACTATTATA
TGTTTTAAGTTTTGATTCTTATAGTATTTTCCAGCTCTGACATTTGTTTCCAAAGACACACTAACTGCATTGC
ACAGTTCAAAATTTGATTACTTAAGGAGTCAATCTAGGTGGTGTCTTGCTTTTAAATTTAACGCAAAACAGAG
ACATATCTATATACATATATTAATTTCAAAGGTTTTTCTTTGACGTTTAAACCTGTGACAAACAGATATTACA
TTTGATTATAGATAATTAATGCTATTAATAAATTTTAGTACAAATTTCAAAACCGTGTTTTTCTGACTTAGAATA
TATGTCAAATCCAGCTTCCCGAAACACTAATAATTAAGTACATCAATGTACTAAATAATCATTAGTTGCACC
CATGGGGAAGATTGTGTTACTGCCCTTCACAGTGAAAAAAGAAAACTTTTCATTTTTTAAATTTAGGAGATGTT
ACGTAACTTGGCACTTTAGTAGTGTATACACTAGCATATTGTTTATACACACTTTTGCCGCTGGGGAATTCAGT
TGAAATGTCCCTCAATCATATAGGCTGGAATACATCTTTCAATCATAAATTTGCTGCAGATAATGGAATGTTT
GCCATCGAGATTATTTTCATTTATACTATAAACAAGCAAACTAGTCCAGTTTAAATTTTTGACTTAGAATA
TTGCACATTTCTATATATGAGTTATTAGATTAGTATCTATGTAGGTTCACTCAGATCCAACCATGGATTGCG
GTATTATAGCTGTATAACCTACAAAAACATAGAAGTATTATTTGCCTTCATAATAGAACCAGAGCTGTGTTT
AATTTATGAATTCAGTATTTGCACGAGATTTTGATTCCCAAGTTTGGAAAAAATGACAAAAACCAAGGAGAA
GAAGGAACAGACCTTAGTGCCACATATTTTCTCTGGGGTGTGAAGGTAGTCTCCTGCTTCCAGAACACTTT

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FIGURE 2036B

ATTATATTTCACTTATAGACCTGATTTTCTGTGTCAAAGTATAATTCTCATGCTGAAGCTGTAGCCTAAAAAGCC
AAAAGAAAGTTGTCTTCATTGTACAAACATATTCATCACTTTAAACAATAAGGGAACAAAATTTAGTATTCAGCT
GAGTGAGAACTACTGTTTCAATGAGCATGTCCCTAAGATAAACAGAAATTGGCAGTTAATTTAGGCGTCTAGAAAA
TCTCAGTTCCCAACAGTAAAATTATCCTGAGTAGCTAATGCACCTTGAGAAAAATCTGGCATACTGAATAATAA
CATTAACTTGGGAGCCAGAGCTGGGTAAAGCCTTACCTTTAGACTACTCTGTGACTACAGAAATAAGCCAGCAC
TTTTGGAACATAAAGCCTTCACCTTGTCAATATCATAAAGAGTATTGCCCACTGAACCTTGTCTCCCCTGGTTT
AATAGTTACTTATTTCTGCCTAAGCACTCACCTTCCGATTTTACCCAAGTATATATATAGGATAGAAAAAATGC
ATTATATTTGAGAGCTACTTCGCCCAATTACAAAATGAGTGTTTTTAGATTCAAGTGACAGTAAAAGGATTGT
TCCCTTCAGTGACTTGAGTGTTTTAGTTATGCATAAGTATTTCTAGCAAAGGAAGGGTAGAAAAGGAATTGAAAAT
TAATTTACACTAGTTGCTACTTGGGAATAAAGGGCTTTTTGAGGGGGGTATGGATATTAATGTTTTCGTTATAT
ACTTATCCCTATTAAAAACAGGCAGTTGTTTCTTTGAATATGCCTAAATAACAGTATTTCTTAAATCTGACAGACA
AGTAACATGTCAATTACTTGATATTCCTTGCTCCAGTACCACAGGCCACTCTTGACATCCCATGTTTGCCTGGA
TAAAGTTCCCTCATTTCAAACAGTATACATACTTCTTTGCAGTTCATTATAGTAAGGCTTAACCTGTAAACAGTAT
CTGATGGCCCACTATAAATAAATTCAGCATTCATTTTAAATAATTTGTATGCCACCAATTGTATTATTGT
CTCAATAAATACTTAGTCATCAATGC

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FIGURE 2037

CTCCCCGGCGCCGCCGCGCAGGCGCCCCCGCCCGCGCTCGCCGCCGCCGAGCCAGGAGCCGCTGCACCAATGC
CCCGCATAGATGCGGACCTCAAGCTCGACTTCAAGGATGTCCTGCTCCGACCTAAAGCGGAGCAGCCTCAAGAGCC
GAGCCGAGGTGGATCTTGAACGCACCTTCACGTTTCGAAATTCAAAGCAGACCTACTCAGGGATTCCCATCATCG
TGGCCAACATGGACACTGTGGGCACGTTTGAGATGGCAGCCGTGATGTCACAGCACTCCATGTTTACAGCAATTC
ATAAGCATTACTCCCTGGGATGACTGGGAAGCTCTTGGCCACAATCACCAGAATGCCTGCAGAATGATAGCCGTGA
GTTCAGGCAGTGGGCAGAAATGATCTGGAAGATGACCAAGCATCTGGAAGCTGTGCCACAGGTTAAGTTTATTT
GCCTGGATGTGGCCAATGGGTATTAGAAATTTTGTGGAATTGCTGAAACTTGTCCGTGCCAAATTTCTGAAC
ACACCATTATGGCAGGGAACGTGGTGACAGGAGAAATGGTAGAAGAGCTTATTCCTTCCGGAGCAGATATCATCA
AAGTGGGAGTTGGACCAAGTTCTGTGTGCACCAACCCGACCAAGACGGGAGTGGGGTACCCCCAGCTGAGTGCCG
TCATTGAGTGTGCCGACTCTGCCATGGCCTGAAGGGCCACATCATCTCTGATGGAGGCTGTACGTGTCCAGGGG
ATGTCGCCAAAGCCTTTGGAGCTGGAGCAGATTTTGTATGCTGGGAGGAATGTTTTCGGGTACATACGGAGTGTG
CTGGAGAAGTGTTTGAGAGGAACGGACGGAAGCTCAAGCTCTTCTACGGGATGAGCTCTGACACCGCCATGAACA
AGCACGCAGGAGGAGTTGCTGAGTACAGAGCCTCTGAGGGTAAGACTGTGGAAGTTCCTTACAAGGAGATGTGG
AAAACACTATCCTGGATATTCTCGGGGAGCTGAGGTCCACGTGCACCTACGTGGGGGCCGCCAACTCAAGGAGC
TCAGCAGGAGGGCAACATTATCCGGGTGACCCAGCAGCAACAACCGTGTTGAGCTAAACCTGGGGGCAAAAGCA
GCGTCTGGCTCGAGTGGAGCGTCCAAACCTGCTTTTCCCATCTCCCCCAAGTCTGTTCCGTGAGAGCTTCTGG
CTGCTCTGAAATGGTGAATGCTGTGTCTCTCTTCTGTCTCTGCTGCTGCTGGAGGCTTCGGGGGCTCTCCCGCCT
GCCTTCTCGGGGCCAGCAGCGCAAGGCACCGATTGGGGCAACATCAGAGCCCTGCTGCCAGAATCTATAACCTCA
TTGTTCAAACCAACACTTGCACCTTTCTCTTTTCTCTTCTCTCTCCCTTCTTTGTTTTCTTCTTTTTTAA
AAGAAGATGGTTTCACTTTAATATAATGCTATTATCTT

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FIGURE 2038

MPRIDADLKLDKDVLLRPKRSSLKSRAEVDLERITFTFRNSKQTYSGIPIIVANMDTVGTFEMAAVMSQHSMTA
IHKHYSLDDWKL FATNHPECLQNVAVSSGSGQNDLEKMTSILEAVPQVKFICLDVANGYSEHFVEFVKLVRAKFP
EHTIMAGNVVTGEMVEELILSGADI I KVGVPGPSVCTTRKTG VGPQLSAVIECADSAHGLKGHIISDGGCTCP
GDVAKAFGAGADFVMLGGMFSGHTECAGEVFERNGRKLKLFYGMSSDTAMNKHAGGVAEYRASEGKTVEVPYKGD
VENTILDILGGLRSTCTYVGAALKKELSRRTFIRVTQHQNTVFS

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FIGURE 2039A

GTTTTACTAAAGTGAATTTTTTTTTGTTTGCITCGTTCGTCITTTGGCTCTTTTTTTTCCCTCCCAATTTCCGAT
 TTATTTCAAGGCGAATCTGGCTTTGGGGGAAGAGGAAGAAAAGTCGGATTACAAGATCAACCACCAACCAACAA
 ATAAAAACCCACAGGATATTTTTTTGCAATTTCTGACGGCTTTAAATTCATGAAGCAATTTGCCCTTTTGGCAA
 TCAGCATTGGATCTCAGAAATGACGAAGGAAGACCCAGAGGAATATCATTCAGAAGAAATACGATGACAGTGA
 TGGGATTCCGTGGTCAAGAAACGGGTGGTACGTAAAGTCCTTTATTTTGTCTCGAAGGAGTTCAAGAATTTCCCA
 GAAGAGGCAGCATGCGGAAGCATCTTCTGGGAGCTGAAAACCTGTGAATGGGCTCTTGGTAATGACCAAGTCTAA
 GGGATTAGGACCAGCATCAGAACAGTCAGAGAATGAAAGGACGATGCATCCCAAGTGCTCTCCACTAGCAACGA
 GTTGTAGTCTTCAGATTTTGAAGAAGGGCCGTGAGGAAAAGGCCAGGCTCGAAGCAAAAGGAAGTTTGCTCA
 GTCTCAGCCGAATAGTCCCAACCAACTCCAGTAAAGATAGTGGAGCCATTGCTACCCCTCCAGCTACTCAGAT
 ATCAGACCTCTCTAAAAGGAAGCCTAAGACAGAAGATTTCTTACCTTTCTCTGCTTCGAGGTTCTCTCGGCT
 GCCCAACAGCATGGTGTATTTTGAAGCTCTCAGGATGAGGAGGAAGTCGAGGAGGAAGATGATGAGACAGAAGA
 CGTCAAAACAGCCACCAACATGCTTCATCTCATGCCAGTCGACCCCAAGGAAGAAAACCCACAAACATGT
 TCACAACGGGCATGTTTTCAATGTTCCAGCAGGTCAACACGGGAGAAGGAACCTGTTCAAAACACAAAAGCAA
 AGAGGCCACTCCCGCAAGGAGAAGCAGCGATACCGGGCTGACAGCCCGGGGAGCAGGCTTCAGCTAACCA
 CCCCAGCAGCGCCCCCTCCACGGGTTCTCGGCCAAGGGGCTTGCTGCCACCCATCACACCCCCCTCTGATCTG
 GTCCGCTCAGGACTTACGGAAACAGAGTTCTAAGGTAACGGAGTCACTCGAATGTCTCTCTGGGTGCGAGGTGT
 AACCAGTGCCAAAAGATGCGCGAGGTCAAGCCTTACCATCCAAAACCTGTGAAGTACACTGCCAGGTGACGAA
 GGGGGCTGTGCATACACCAAGGCAGAGAGAAGTGGTCAAGGACACCAACCCCAATCACCACAGGCCAGTTC
 CGCTGTCAACCCACACAATCTCAGGGAAGTACGAATGCAAAACCCGCAACAGGTGCTATCCCTCGG
 GGGGGCTCAAGTCCAGTGGGCCGCCGCTCAATGGCCTCAAGGTCAAGTGGAGGTTGAACCCAAAGTCATGCAC
 TAAGGAGTGGGGCCGCCGAGCTCGCGGAGGGCCTGACAGTTCGCGGAGGGCTCGGAAGTCCCAAGAGAGACT
 GGAAGAGGCACACAGGCGGAGAAGCCGAGTCGCCCCCAAGAAGATGAAAGGGGCGGCTGGCCCCGCCAAGG
 CCTTGGCAAGAGGCCCGGCCGAGAGAGGTCTGTGAACGGACACGTTGAAGAAGGAAGTGCAGGAGCGCAGTCT
 GGAGAGGAATCGGCCGAAGCGGCCACGCCCGGGAAGAGCAGCCAGGCAGACACATGGCAAGCGGACAG
 CGCTCTCTGTGAAAAATCGTTCTACCTCGCAACCGGAGTCCGTGCAACAGCCCGAGGACTCGGGCAGGCGGAG
 GGGCGGCGGCAAGGCCGGGTGGCGGCCATGGACGAGATCCCCGTCCTCAGGCCCTCCGCCAAGGAGTTCCAGGA
 TCCGCTCATCTACATCGAGTCGGTCCGCGCTCAGGTGGAGAAGTTCGGGATGTGCAAGGTATGCCCCCTCGGA
 CTGGCGCGCGAGTGCAAGCTCAACGATGAGATGCGGTTTGTACGCGAGATTACGACATCCACAACTGGGCCG
 CGCTCTGGGCGCCCAAGCTGCAAGGCTGGCCTGTCATCAAGAAGCACTCAAACTCTCAGGGCATCAGGTGAGCA
 GCTCCCGCTCATAGGGGCTGTGAGCTCGACTGGCTGCTTTTCCGGCTGATTATGAGATGGGCGGCATGCA
 GCAAGTGACTGACCTCAAAAATGGAACAACTAGCAGACATGCTGCGCATCCCAAGTATGCCAGGACCGGCT
 GGCACAGCTCGAGAGGGCTACTGGCAGTACCTACTCTCTACGACTCCTGTCCCGAGGAGACACCGCGGCT
 GGAGAAGGAGGTGCTGATGGAAGAGAGATCCTGGAGAAGCGCAAGGGGCGCTGGAAAGGCCACACAGAGAACA
 CCACCAAGGTTCCACCTCTGCCCCGCTTCGAGGCCAAGAAATGGGCTCATCCAGCGGCTGGCCCCAGGACGG
 CTTCCGACGCAAGCTCAAGGAGTGGGCCAGGCCAGTTGAAGACTGGCCGCGGCGACTCTTCGCTCAGGAAGA
 AGAAGTGGTCAAGGAAGAGGAGGAGGACAAAGGCGTCTCAATGACTTCCCAAGTGCACTATAGGGAAGGTC
 GTTTTCTTAACAACCTTTTATCGAACAGCGAGGAATACTATGACATGTGTTTCAAGGAGGCTTCCGCCAG
 CGAAATCGACGAAGAGTACTGGAGCTAGTGGAAAGAGAAGGACTGCCAGTGGCAATGCACTGCGGCAAGGTGGA
 CACCAACACTCAGCGCAGTGGATTCCAGTAGGAAATCAGAACCTTTTCCAGGATGAGTGAACCTCAGCT
 CCTCCCAATAACACAGGGTCCATCCTGCGTCACTCGGTGCTGTGCTGGAGTGACTATTCCTGGCTAAATAT
 TGGCATGCTTTTCTACCTCATGCTGGTCTCGAGACCAAAATCACCCTCCATACATTGACTACTTACACACTGG
 TGCTGACTGCAITTTGGTATTGCACTTCTGCTGAGGAGGAGAACAAGCTGGAAGATGTGGTCCACACCTGCTGCA
 AGCCAAATGGCAGCCCGAGGCTGCAGATGCTGGAAGCAACGTCATGATCTCCCGGAGGTGCTGTGCAAGAGGG
 GATCAAGGTGCACAGGACCTGTCAGCAGAGTGGCCAGTTGTGCTGCTGCTCCCGGAGTCTTTGTGTTCAAAAT
 GTGCTGTGGGTACAGGCTGTGCAAAACCGTGACATTTGTGTAACCCAGTGCAGAAAGATGGGCTTTGAGACCGC
 CAAGGAAATGAAGCGTCGCCATATAGCTAAGCCATTCTCCATGGAGAAGTTACTCTACAGATGTCACAGACGA
 AGCAAAAAGAAAGAACCGTCCCACTCTCAGTACCATTCTAGCCCTCTCGGATGCTGAGGATACAGAGCTGCG
 GCAGCGCAGGCAGCTGTTCCAGGCTGGCTCCACTCTCCGACGCTATGGCAGCCAGATGGCAGCAGCAGCGT

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FIGURE 2039B

GGCGGACGGGAAGAAAAAGCCTCGAAAGTGGCTGCAGTTGGAGACGTGAGAGGAGGTGTGAGATCTGCCAGCA
CCTGTGCTACCTGTCCATGGTGGTCAAGAGAACGAAAAACGTCGTGTTCTGTCTGGAGTGTGCTCTGCCGCCACGT
GGAGAAACAGAAAGTCTCTGCCGAGGGCTGAAGTTGATGTACCGCTACGATGAGGAACAGATTATCAGTCTGGTCAA
TCAGATCTGCCGCAAGAGTGTCTGGTAAAAACGGCAGCATTGAGAACTGTCTCAGTAAACCCACACCAAAAAAGAGG
TCCCCGCAAGAGAGCGACAGTGGAGCGTCCCCCCTCCCGTCTGTGAGCCTCCAGTTTCATCCAAAAGTGCTTCGAG
CTCATCATGAAGATGCCAACGCCCGTGGTCCGATTATATATATATTTTTTTGTAAATTATTAATTCTAGTTTGGAGT
ACTTGTCTGAGGATTCAGAGTGTCTTTGCACGTAGCTCTAAAGAAGATTTTCTCTGGTTTATAGAGAACTAATTTT
GTTTTAGCATTAACCTGTGTGAACTTTTTTTTGTACTTAGAAAAACCTAGATACTGCAGTCAGATTITGGAAACTGC
CGTATAGTCACTGTTTTAAAAACCCCGGAGGGGCTGTATTAATTTGTATTGCCCCATGGCTGACAAAAAGCCTTTT
TTTTTGGTTTTGTATTTTTTTTTTTTGTAACTGTTGGGGGAAAAAGGCTTTTTAAACCCATTTTTGAAGAGGGTG
AAGTTTTGGAGAACAAATTTAAAAACCATCAGTCATGTGAGCAGATTTTTAGAAAGGATAGGAGACACACGCCA
CACACACACACACGAAACTTGAATGGCTTTGCTTTGGCTGTCTCTCTGCCGTGTGCCAGATGAGCTTGTG
ATCTGGGAAGCCGGGGCACCCCGTTTTGTTTCTCTGGCGGTTGTGGCAGCTGAAGCGGACGTTGTTTCCTAA
CCATAGGTGGAACGAGGAGACGGGAGCGAGTGGGCTCTCCACGACACATCACTATGCATCTGTTCCAGGAAAGA
AGAAAAAGCGAGCGAGGAAGACGGAAAGACTGCCGTGCCTTGGAGGGGTACATGAGGGAGACCTGTGCCCTGATTT
CATTTAGGAAATCCATTCTGTTATTTTTTGGTGCTGTTGGCTACTTTATCAAAAAACCCCTCAATAGCATCCTTAA
GATTTAAAAAAGAAAAAAGGAAAAAAGTGATGAAGCCGTAAAGTGCTTTTGTCACTCGACGTGCA
ATCTTTCTAACATTCCTCTCCATCTCACCCTCTCTGTTTGACACCTTCACAAGTCAGCATTAATCTTTCTTTT
AAAACTTGTTCATTATGATCATGTAGAGAGCCACTAGGAGCCCTGCAGTTATTTTTGAATGTGAAAAATGCATT
TGCGTTTCATCTTGTCTATTTTTCTCTCATGTTGTAACAAAAAAGGAAAAAAGAAAAAATCCCATCCCTTTT
GTACATA TGCTGTAAATGTTTTAAATACTTGAGCCTTTTTCTCGGTGGGGGTGGGGAGGGGGGTGAGAAGAC
AAGATGAAGAAAAGCCTTACATTTTCAGTTTCTTCATCGGTTGGATTGGATGCTTACAGGGTTTTTCTGTGAACAT
TTATAAGTGCTGCTTACATCACTGAACACACAAAAAATAATAATTGGAGTAGCTGTTGCCCTTCTCCGGTTGT
GTGTACAGTATGTGTGGAATAAAAAAGGGAACCTGTTTTACAAGCTGTTCTTTGTTTCATAATTGGATTTCATCA
ATCCCGTAGCTACCCATA TTGCACTGAGCTTGCCAGTGGTACTGCCAGAACGCTCTATGATCCACTTTGTGG
TTGTTGTTGCAGAACTGAAGTGTTTTGGAAATATTAACAATTACAGAAACAGTCAAGTGTITTTCCAAATGTGGT
TGTCGGGTTTTCTATGGCCTTGCTGTGACTTTTCCCTCTTTTGTACAGTAACTCTGCCTATGGCTTACAGTTTG
ACATTTAATTTATTAGCGCTGCTCTGCACCCCTCCCTGGGAGGGAGACTTCATGTGGTTTATGCGAGTTTTTT
GTTTACTTTTCAGGTTTGTACTACAAGTTTAAATAAAAAACAAAGTTTTTTTGGAT

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FIGURE 2040

MSKERPKRNI IQKKYDDSDGIPWSEERVVRKVLYLSLKEFKNSQKRQHAEGIAGSLKTVNGLLGNDQSKGLGPAS
EQSENEKDDASQVSSSTNDVSSSDFEEGPRSRRPRLQAQRKFAQSQPNPSSTTPVKIVEPLLPPTAQISDLSKR
KPKTEDFLTFLCLRGSPALPNSMVYFGSSQDEEEVEEDEDDEDVKTATNNASSCQSTPRKGKTHKHVHNGHVF
NGSSRSSTREKEPVQKHKS KEATPAKEKHS DHRADSRREQASANHPAAAPSTGSSAKGLAATHHHHPPLHRS AQDLR
KQSVKVGVTIRMSSLAGVTS AKKMREVRPSPSKTVKYTAIVTKGAVTYTKAKREL VKDTPKNHHPSSAVNHTI
SGKTESNAKTRKQVLSLGGASKSTGPAVNLKVSGRNLNPKSCTKEVGGRLREGLQLREGLRNSKRRLEEAHQA
EKPQSPFKMKGAAGPAEGPGKKA PAERGLLNHGVKKEVPERSLERNRPKRATAGKSTPGRQAHGKADSASCENR
STSQPESVHKPDQSGKAEGGGKAGWAAMDEI PVLRPSAKEFH DPLIYIESVRAQVEKFGMCRVIPPDPWRPECK
LNDEMRFVTQIQHIHKLGRRWGPNVQRLACIKKHLKSQGITMDELPLIGGCELD LACFFRLINEMGGMQVQTDLK
KWNKLADMLRIPRTAQDRLAKLQEAYCQYLLSYDLSPEEHRRLKEVLEMEKEILEKRKGPLEGHTENDHHKFHP
LPRFEPKNGLIHGVA PRNGFRSKLKEVGQAQLKTGRRLFAQEKEVVEEEDKGVLNDFHFKCIYKGRSVSLTTF
YRTARNIMSMCFSEKPA PAEIEQEYWRLVEEKDCHVAVHCGKVDTNTHGSGFPVVGKSEPFSSRHGWNLT VLPNN TG
SILRHLGAVPGVTIPWLNIGMVFTSCWSRDQNHLPYIDYLHTGADCIWYCIPAEENKLEDVVHTLLQANGTPG
LQMLESNVMI SPEVLCKEGIKVHRTVQQSGQFVVCPPGFSFVKVCCGYSVSETVHFATTQWTSMGFETAKEMKRR
HIAKPFMEKLLYQIAQAEAKKENGPTLSTISALLDELDRDTELRQRRLFEAGLHSSARYGSHDGSSTVADGKKK
PRKWQLQETSERRQCICQHLCYLSMVVQENENVVFCLEALRHVEKQKSCRGLKLMYRYDEEQIISLVNQICGKV
SGKNGSIENCLSKPTPKRGPRKRATVDVPPSRLSASSSSKSASSSS

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FIGURE 2041

GCCCATGCCCGCCCCGCGTAGACGCTGTGGTGTGTACGGCCGAGCGGGGCAGGGGGTCTCCGAGGCCGCTGCG
GCACGTAATCAGAGAGCTTTCAAAAGCATCACTCATGAACTGACTTGTTTAGAGCCCTCCCCTGCTCCCTGCSC
TGCACTGACAAATGCCATCTATACCCCTCAGCATGACCCAGGAGGAACATATTTTCATTTCAATCACTCTTGGAAG
GCACCCAGAAATTGCTAACCAAATCTGGCTCCCTTTGAAATGAGGCCTGTATTTGTGGAGGTCACGGGACATACA
GGTGTTACATCATCTCTGTGAGATGAAGAAGATTGCATGCAGCAGTTTCATTAAGATCGATGGCAAGGTCCGA
ACTGACAAAACCTACCCTGCTGGATTCAATGGATGTCATCAGCATTGACAAGATGGGAGAGAATTTTGTCTGATC
TATGACACCAAGGGTCACTTTGCTGTACATTGTATTACACCTGAGGAAGCCAAAATTGGTGTGATCACCAACAGA
GAGAGGCACCCCTGGATCTTTTGACGTGTTTACATGAAAGATGCCAATGGCCACAGCTTTGCCACTCAACTTTCC
AACATTTTGTATTGGCAAGGGCAACAAACCATGGATTCTCTTCCTGTA

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FIGURE 2042

CCITTCGGTCTGGCGGCAGCCATCAGGTAAGCCAAAGATGGGTGCATACAAGTACATCCAGGAGCTATGGAGAAAG
AAGCAGTCTGATGTCTATGCGCTTTCTTCTGAGGGTCCGCTGCTGGCAGTACCGCCAGCTCTCTGCTCTCCACAGG
GCTCCCCGCCCCACCCGGCCTGATAAAGCGCGCCGACTGGGCTACAAGGCCAAGCAAGGTTACGTTATATATAGG
ATTCGTGTTCGCCGTGGTGGCCGTAAACAGCTAAAGTTTGCTCGAAGCCTTCAGTCCGTTCAGAGGAGCGAGTT
GGACGCCACTGTGGGGCTCTGAGGGTCCCTGAATTCTTACTGGGTGGGGAAGATTCCACATACAAATTTTTGAG
GTTATCCTCATTGATCCATTCCATAAAGCTATCAGAAGAAATCCTGACACCCAGTGGATCACCAAACCAGTCCAC
AAGCACAGGGAGATGCGTGGGCTGACATCTGCAGGCCGAAAGAGCCGTGGCCTTGGAAGGGCCATAAGTCCAC
CACACTATTGGTGGCTCTGCGGGGAGCTTGGAGAAGGCGCAATACTCTCCAGTCCACCGTTACCGCTAAATAT
AAGTAAAGTCTGTAAAATTCATACTTAATAAA

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FIGURE 2043

MGAYKYIQELWRKKQSDVMRFLLRVRCWQYRQLSALHRAPRPTRPDKARRLGYKAKQGYVIYRIRVRRGGRNQLK
FARSLQSVAEERVGRHCGALRVLNSYWVGEDSTYKFFEVLIDPFHKAIRRNPDQTQWITKPVHKKHREMRGLTSAG
RKSRLGKGHKFHHTIGGSRRAAWRRRNTLQLHRYR

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FIGURE 2044A

CCGACCAACACCAACACCCAGCTCCGACGCGAGCTCCTCTGCGCCCTTGCCGCCCTCCGAGCCACAGCTTTCCTCC
CGCTCCTGCCCCCGGCCGCTGCGCGTCTCCGCGCTCGCAGCGGCCCTCGGAGGAGGCCAGGTACGCGAGCAGCGACC
TCGGCGCCCTTCGCGACTCCCGCCCGGTTCCCGGCCGTCGCGCTATCCTTGCCGCCCTCCGCTTTCTCCGCGCC
GGCCCGCCCTCGCTTATGCTCGGCCGTGAGCCGCTCTCCCGATTGCCGCCGACATGAGCTGCAACGGAGGCTCC
CACC CGCGGATCAACACTCTGGGCCGATGATCGCGCCGAGTGTGCCGCCGACCTGCGCTACGAGGTGACCAGC
GGCGGCCGGGACACAGCAGGATGTACTATTTCGGCGCGCGGTGATCACCGCACCAGAACTCGGACGGCTACTGT
CAAACCGGCACGATGTCCAGGCACCAAGAACCAACACCATCCAGAGAGCTGCTGCAGAACTGCTCCGACTCGTTGT
ATCGGAGCAGAGCTCATCTGTCAGCCTGAATTGAAGTATGGAGATGGAATACAACCTGACTCGGAGTCGAAATG
GATGAGTGTTCGCCAGGCCAATGACCAAAATGGAATCCTCGACAGCTTGATCAGAGAGATCGGCGAGATGGGC
CAGCCCTGTGATGCTTACCAGAAAAGGCTTCTTCAGCTCCAAGAGCAAAATCGAGCCCTTTATAAAGCCATCAGT
GTCCCTCGAGTTCGCGAGGCCAGCTCCAAGGGTGGTGAGGCTACACTTGTAGAGTGCTCTGGCTGGGATGAG
TTCAACCAACATGTCACAGTGAATGTTTGGGGTGGATGAGGCAGCAAGGGCGGAGATGGACATGTTGGCTGG
GGTGTGGACCTGGCCCTCAGTGGAGCAGCACATTAAACGCCACCGGGGCTCCACAACCTCCATCGCGCACTGCG
TGGCAGCTGGACAAAATCAAAGCCGACCTGCGCGAGAAAATCTGCTATCTACCAGTTGGAGGAGGAGTATGAAAAC
CTGCTGAAAAGCGTCCCTTTGAGAGGATGGATCACTTCGCGACAGCTGCAGAACATCAATCAGGCCGATCCCGAGGAG
ATCATGTGGATCAATGACTCGGAGGAGGAGGAGCTGCTGTACGACTGGAGCGACAGAACCAACATCGCTCAG
AAACAGGAGGCTTCTCCATACGCATGAGTCACTGGAAGTTAAAGAAAAGAGCTCAATAAGCTGAAACAAAGA
AGTGACCAACTTGTCTCAATCAGCATCCAGCTTCAGACAAAATGAGGSCATATGGACACTCTGCAGACCGAG
TGGAGTTGGATTTCTCAGATCAACCAAGTGCATTGATGTTCACTGAAAGAAAATGTGCGCTACTTTCAGTTTCTT
GAAGAGCGCGAGTCTACTGAAGCATACCTGAAGGGCTCCAGGACTCCATCAGGAAGAAGTACCCCTCGCACAG
AACATGCCCTCGGACACTGCTGGAACAGATCAAGGAGCTGGAGAAAGACGAGAGAAAATCTTGAATCAAG
CGTCAGGTGCAGAACTTGGTAAACAAGTCTAAGAAGATTGTACAGCTGAAGCCTCGTAACCCAGACTACAGAAGC
AATAAACCCATTATCTCAGAGCTCTCTGTGACTACAAACAAGATCAGAAAATCGTGCATAAGGGGGATGAGTGT
ATCCTGAAGGACAAACGAGCGCAGCAAGTGGTACGTGACGGGCCGGGAGGCGTTGACATGCGCTTTGTCCTCT
GTGGGGCTGATCATCCCTCTCCGAACCCACTGGCCGTGGACCTCTCTTTGCAAGATTGAGCAGTACTACGAAGCC
ATCTTGGCTCTGTGGAACCACTCTACATCAACATGAAGAGCCTGGTGTCTCGGCACTATCGATGATTGACATA
GAGAAGATCAGGGCCATGCAATCGCCAAGCTGAAAACAATGGCGCAGGAAGATTACATGAAGCAGATAGCCGAC
CTTGAGTTACATTACCAAGAGTTTCATCAGAAAATAGCCAAGGCTCAGAGATGTTTGGAGATGATGACAGCGGAA
ATACAGTCTCAGTTCCAGGATGCCCAGAAGCATTACCAGACCCTGGTCACTCAGCTCCCTCGCTATCCCCAGAC
CAGACAGTGACCAACAATGAAATCACTCATGGAACCTGCCAAGATGTCAACCAATAAAGATTAATGAAACC
AACAGGAAAATGACAAGCAAAAGAACATGGAATGCTGATGGAGTGTGCAAGAGTTCGCGAGGATAGGACTGCTG
GAGGGCAGGATGACTCTCAAAAACCTCCCTCTAGCAGACCAGGGATCTTCTCACCACATCACAGTGAAAATTAAC
GAGCTTAAGAGTGTGCAAGATGATTCACAAGCAATTGTGAGGTTCTCAACACAGTCTAAGATTAATGCTTGCCAACT
TTCAGAGGTTCTGAAAAGTATGCTAATTCAGAAATTAATGGACTATTTCAGAACTGGAATAATCAAT
GGTGTTACAGATGGCTACTTAAATAGCTTATGCACAGTAAGGGCACTGCTCCAGGCTATTCTCCAAACAGAAAGC
ATGTTAAAGGTTTATGAAGCCAGGCTCACTGAGGAGGAACTGTCTGCTGGACCTGGATAAATGGAAGCTTAC
CGCTGTGGACTGAAGAAAATAAAAAATGACTTGAACCTGAAGAGAGTCAAAATTTGTGGCCACTATGAAGACAGAACTA
CAGAAAGGCCACAGAGTCCACTCTCAGACTTCACAGCAGTATCCACTTTATGATCTGGACTGGGCAAGTTCCGTT
CGGATCGCACAGCTGCAGACAGCCGTGGCAAGGATAGATAAACAGACAGTCACTTTCAGTGTAGGATGGGACCTGGAG
AAACAATCAAGCAATTAGGGAATATCGTGATACTATCAGGCTTCTGCAAGTGGCTCTATGATGCTAAACGC
CTCCAGGATTCCTTAGAATCCATGAAATTTGGAGATTCCAACACAGTCAATGCGGTTTTTGAATGAGCAGAGAAGAC
TGCGCAGTGAATAATCTGGCAAAACGAGACAAAATCAGAGGAAGTCAAAAATTTGTGAACTTGGCCCAATCTA
ATTAAGGATTATGAGCTCAGCTGGCCCTATACACTCAGGACTCGAAGAACTCTGCTGAACATACCTATCAAGAGG
ACCATGATTCAGTCCCTCTCGGGGTGATTCTGCAAGAGGCTGCAAGTGTTCATGTCTCGGTACATGTAACCTACTT
ACAAGATCTGAGAGCTATTACAGGTTCTTAAGTGAGATGCTGAAGAGTTTGAAGATCTGAAGCTGAAAATACC
AAGATCGAAGTTTTGGAAGAGGAGCTCAGACTGGCCCGAGATGCCAATCGGAAAACCTGAATAAGAACAAATCT
CTGGATCAGAACTCGCAGAAATACAGGCAGAGTGTTCAGTTCAAAGCGAAGCTTGGGAGGCTGGAGAGGCTG
AAGAGACAGGCTGAGCTGGATGGGAGTCGGCTAAGCAAAAATCTAGACAACTGCTACGGCCAAAATAAAGAACTC

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FIGURE 2044B

AATGAGAAGATCACCCGACTGACTTATGAGATTGAAGATGAAAAGAGAAGAAGAAATCTGTGGAAGACAGATTT
GACCACCAAGAAGATGACTATGACCAACTGCGAAGAACGAGGCAATGTGAAAAGGAGAACCTTGGTTGGCGAGAAA
TTAGAGCTCTGAGAAAAGCCATCAAGGAGAAGGAGTACGAGATTGAAAAGGTTGAGGGTTCTACTCGCAGGAAGAAGGC
ACCCGGAAGAGAGAATATGAAATGAGCTGGCAAGGTAAGAAACCCTATATAGGAGATGAGTAATTTAAGG
AACAAAGTATGAACACAGAGATTAA CATTACGAAGACCACCATCAAGGAGATATCCATGCAAAAAGAGGATGATTC
AAAACTCTTGAACACAGCTGTGATAGACTTTCAAGGGAATACTCGAGATCTGAAGGATGAAATTTGCTAGGCTCAAT
GACAGCATCTTGCAGGCCACTGAGCAGCGAAGGCGAGCTGAAGAAAACGCCCTTCAGCAAAAGCGCTGTGGCTCT
GAGATAATGCAGAAGAAGCAGCATCTGGAGATAGACTGAAGCAGGTCATGCAGACCGCTCTGTAGGACAATGCC
CGCGACAAGCAGCTCCCTGGAGGAGGCTGCCAAGACCATTGAGGACAAAAATAAGGAGATCGAGAGACTCAAAGCT
GAGTTTCAGGAGGAGGCCAAGCGCCGCTGGGAATATGAAAATGAACTGAGTAAGGTAAAGAAACAATATGATGAG
GAGATCATTAGCTTAAAAAATCAGTTTGAGACCAGATCAACATCACCAGACCACCATCCACAGCTCACCATG
CAGAAGGAAGAGGATACCAGTGGCTACCGGGCTCAGATAGACAATCTCACCCGAGAAAACAGGAGCTTATCTGAA
GAAATAAAGAGGCTGAAGAACCTCTTAACCCAGACCACAGAGAACTCTCAGGAGGGTGGGAAGAAGCATCCAAAG
CAAAAGGCCACTGGCTCTGAGGTGTCTCAGAGGAAACAGCAGCTGAGGTTGAGCTGAGACAAGTCACTCAGATG
CGAACAGAGGAGAGCGGTAAAGATAAAGCAATCTCTGATGATGCTGCCAAAACCATCCAGGATAAAAACAAGGAG
ATAGAAGGGTTAAACAACTGATCGACAAGAAACAAATGACCGGAAATGCGTGAAGATGAAACCGGAGATT
CAAAGGGTCCAGTATGACCTGCAGAAAAGCAACAGTAGTGGCAGCGAGACAATAAACAACTGAAGGTTCAAGGAG
CAGAAGCTGACACGCTCGAGGATCGACTATGAAGGGTTTCCAGGAGGAGGACTGTGAAGGACCCAGGATATCAGC
CGGTTTCAGAACTCTCGAAGAGCTGCAGCTGCAGAAAGCAGAGGTGGGAAGAGGAGCTGAATCGGCTGAAGAGG
ACCCGGCTCAGAAGACTCTCGAAGGAGGAAGAGCTGGAGGAAGAGCTGGAAGGATAGAGGAGTGCCTGAAGGAG
CAAGCCATCAAAATCACCACTGACCCAGCAGCTGGAGCAGGCATCCATTGTTAAGAAGAGAGTGAAGATTGAC
CTCCGGGAGCAGAGGAGGCTGCTGGATGGCCACTGAGGGAAGAGCAGAGGACCCAGGAAGAGCTGAGGAGGCTC
TCTTCTGAGGCTGAGGCCCTGAGCGGCGAGTTACTCTCAGGAACAGGAAAGTGTCAAAACAGCTCACTTGAAGGAAT
GAGCATTTCCAGAAGGCGCATAGAAGATAAAGCAGAAAGCTTAAATGAAAACAAAATGAAATTTGAGAGGCTGCAG
TCTCTCAGAGAACCTGACCAAGGAGCACTTGATGTTAGAAGAAGAACTGCGGAACCTGAGGCTGGAGTACGAT
GACCTGAGGAGAGGACGAAGCGAAGCGGACAGTGATAAAAATGCAACCATCTTGGAACTAAGGAGCCAGCTGCAG
ATCAGCAACAAACCGGACCTTGGAACTGCAGGGGCTGATTAATGATTTACA GAGAGAGAGGGAATAATTTGAGACAG
GAAATTTGAGAAATTTCAAAGCAGGCTTTAGAGGCATCTAATAGGATTCAAGGAA TCAAGAA TCACTGTACTCAG
GTGGTACAGGAAGAGGAGGCTTTCTGGTGAAATCAAAGTCTTGAGACAGCAAGGCAAGGCTGCAAGGCTG
GAGGATGAGCTGAATCGTGCAAAATCACTCTAGAGGCAGAAACCGGGTGAACAGCGCCTGGAGTGTGAGAAA
CAGCAAAATTCAGAAATGACCTGAATCAGTGGAAAGTCAATATTCCCAGGAGGAGGCTATTAGGAAGATAGAA
TCGGAAGAGAAAAGATGAGAGAGAGAAAGAACAGCTGTAGAGTGAGATCGAAGAGCTCCAAGCAGAGATCAAG
AGAATTTGAAGAGAGGTGCAGGCGTAAAGCTGGAGGATTCTACCCAGGGAGACACAGTCACTAGTGAAGAACAGAACGC
TCCGATATCAGAGGGAGATTGATAAATCAGACAGCGCCATATGGTGCCATCGAGAGACCCAGACTGAGTGT
GAGTGSACCGTTGACACCTCCAAGCTGGTGTGATGGGCTGAGGAAGAAGGTGACAGCAATGCAGCTCTATGAG
TGTGAGCTGATCGACAAAACCACTTTGGACAACTATTGAAGGGGAAGAGTCAAGTGGAGAGAGTGTGCTCTGAA
ATCCAGCCATTCCTTGGGGTGCAGGATCTATCGCTGGAGCATCTGCTCTCCATAAGGAAAAATCTCTTTGGTA
GAGGCCAAGAGAAAGAAATTAATCAGGCCAGAAATCCACAGTCATGCTCTTGAGGAGCCGAGGACCTGAGGCTGGT
ATAATGATCCCATCGGAATGAGAAGCTGACTGTGACAGTGCCATAGCTCGGAGCTCATTGACTTCTCATGAC
CGTCAGCAGATATATGCAGCAGAAAAAGCTATCACTGGTTTTGATGATCCATTTTCAGGCAAGACAGTATCTGTT
TCAGAAGCCATCAAGAAAAATTTGATTGATAGAGAAACCGGAATGCGCCTGCTGGAAGGCCAGATTGCTTCAAGG
GGTGTAGTAGACCTGTGAACAGTGTCTTTTGC AAAAGATGTCCCTTGGCCCGGGGCTGATTGATAGAGAT
TTGATCGATCCCTGAATGATCCCGGAGATAGTCAGAAAAACTTTTGGGATCCAGTCCAGAAAAAGAGTCAGT
TACGTGCAGTCAGGAAGAACGGTGCAAGTCAACCACTACTGGTCTGCTCTTGCTTCCAGTACAGAAGAGAC
ATGCTCTTCCACAGGAATCAGACAACTGTGACCGTCACTGAGCTAGTAGATTCTGGTATATTGAGACCGTCCACT
GTCAATGAATCGAATCTGTGTCAGATTTCTTATGACAGGTTTGGTGAAGAAATTAAGGACTTCTCCAGGGTTCA
AGCTGCAATAGCAGGCTATATACATGAGACCAAAAACAGAACTTGGCATTTATGAGGCGCATGAATTTGGCTTTA
GTCCGACCTGGTACTGCTGTGGAGTTGCTGGAAGCCCAAGCAGCTACTGCTTTATAGTGGATCTGTTAGCAAC

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FIGURE 2044C

TTGAGGTTACCAGTGGAGGAAGCCTACAAGAGAGGCTGSGTGGGCATTGAGTTCAAAGAGAAGCTCCTGTCTGCA
GAACGAGCTGTCACTGGGTATAATGATCCTGAAACAGGAAACATCATCTCTTTGTTCCAAAGCCATGAATAAGGAA
CTCATCGAAAAGGGCCACGGTATTCCGCTTATTAGAAGCACAGATCGCAACCGGGGGGATCATTGACCCAAAGGAG
AGCCATCGTTTACCAGTTGACATAGCATATAAGAGGGGCTATTCAATGAGGAACTCAGTGAGATTCTCTCAGAT
CCAAGTGATGATACCAAAGGATTTTTTGACCCCAACACTGAAGAAAATCTTACCTATCTGCAACTAAAAGAAAGA
TGCATTAAAGGATGAGGAAACAGGGCTCTGTCTTCTGCCCTCGAAAGAAAAGAAACAGGTGCAGACATCACAA
AAGAAACCCCTCAGGAAGCGTAGAGTGGTCATAGTTGACCCAGAAACCAATAAGAAAATGTCTGTTCCAGGAGGCC
TACAAGAAGGGCCTAATTGATTATGAAACCTTCAAAGAACTGTGTGAGCAGGAATGTGAATGGGAAGAAATAACC
ATCACGGGATCAGATGGCTCCACCAGGGTGGTCCGTGTAGATAGAAAGACAGGCAGTCAGTATGATATTCAAGAT
GCTATTGACAAGGCCCTTGTGACAGGAAGTTCTTTGATCAGTACCGATCGGCAGCCCTCAGCCTCACTCAATTT
GCTGACATGATCTCCTTGAAAAATGGTGTCCGCACACGACGAGCATGGGCAGTGGTGTGACGATGATGTTTT
AGCAGCTCCCAGCATGAATCAGTAAGTAAGATTTCCACCATATCCAGCGTCAGGAATTTAACCATAAGGAGCAGC
TCTTTTTCAGACACCCCTGGAAGAACTCGAGGCCCATTTGCAGCCATCTTTGACACAGAAAACCTGGAGAAAATCTCC
ATTACAGAAGGTATAGAGCGGGGCATCGTTGACAGCATCAGGGTCAGAGGCTTCTGGAGGCTCAGGCCCTGCACA
GGTGGCATCATCCACCACCAACAGGGCCAGAAGCTGTCACTTCAGGACGCGAGTCTCCCAGGGTGTGATTGACCAA
GACATGGCCACCAAGCTGAAGCCTGCTCAGAAAGCCTTCATAGGCTTCGAGGGTGTGAAGGAAAGAAAGATG
TCAGCAGCAGAGGCAGTGAAAGAAAATGGCTCCCGTATGAGGCTGGCCAGCGCTTCTCGAGTTCAGTACCTC
ACGGGAGGTCCTGTTGACCCGGAAGTGATGGGAGGATAAGCACCGAAGGCCATCCGGAAGGGGTTTCATAGAT
GGCCGCGCCGCACAGAGGCTGCAAGACACGACAGCTATGCCAAAATCCTGACCTGCCCCAAAACCAAAATAAAA
ATATCCTATAAGGATGCCATAAATCGCTCCATGGTAGAAGATATCACTGGGCTGCGCCTCTCTGGAAGCGCCCTCC
GTGTCGCTCAAGGGCTTACCCAGGCCCTTACAACATGTCTTCGGCTCCGGGTCCCGCTCCGGCTCCCGCTCGGGA
TCTCGCTCCGATCTCGCTCCGGGTCCCGCAGTGGGTCCCGAGAGGAAAGCTTTGACGCCACAGGGGAATTTCTTC
TACTCTTATCTTACTCATTTAGCAGTAGTCTTATTTGGGCAC TAGTAGTCAGTTGGGAGTGGTGTCTATACCTTG
ACTTCATTATATGAATTTCCACTTTATTAATAATAGAAAAGAAAATCCCGGTGCTTGCAGTAGAGTGATAGGA
CATTTCTATGCTTACAGAAAATATAGCCATGATTGAAATCAAAATAGTAAAGGCTGTCTCGGCTTTTATCTTCTTA
GCTCATCTTAAATAAGCATACACTTGGATGCAGTGCCTCTGAAGTGCTAATCAGTTGTAACAAATAGCACAAATC
GAACCTAGGATTTGTTCTTCTCTCTCTGTTTTCGATTTTGTATCAATCTTTAATTTTGAAGCCCTATAATACA
GTTTTCTATTCTTGGAGATAAAAATTAATGGATCACTGATATTTTAGTCATTCTGCTTCTCATCTAAATATTTT
CATATTTCTGATTAGGAGAAAATACCCTCCAGCACCAGCCCCCTCTCAAACCCCAACCCAAAACCAAGCAT
TTTGAATGAGTCTCCTTTAGTTTTCAGAGTGTGGATTGTATAACCCATATACCTCTCGATGTACTTGTGTGGTT
GGTATTAATTTGACTGTGATGACAGCGCAATCTTTCTTTGGTCAAAGTTTCTGTTTATTTTGTCTGTGCATA
TTCGATGTACTTTAAGGTGCTTTATGAAGTTTGTCTATTCTGGCAATAAATCTTTAGACTTTT

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FIGURE 2045

TCCAAGAAGAGGAAGTTTGTCTACTGATGGCATCTTCTAAGCTGAAATGAATGAGTTTCTTACTCAGGAGCTGGCT
GAAGATGGCTACTCTGGAGTTGAGATGCGAGTTACACCAACCAGGACAGAAATCATTGTCTTAGCCACCAGAACA
CAGAATGTTCTTGGTGAGAAAGGGCCGGCGGATTTCGGGAAC TGACTGCTGTAGTTTCAGAAGAGGTTTGCTCTCCA
GAGGGCAGTGTAGAGCTTTATGCTGAAGAGGTGGCCACTAGGGGTCGTGTGTGCCATTGCCAGGCAGAGTCTCTG
CCTTACAAACTCCTAGGAGGGCTTGCTGTGCGGAGGGCTGCTATGGTGTGTGCGGGTTCATCAITGGAACTGGG
GCCAAAGGCTGTGAGGTCGTGGTGTCTGGGAACTCTGAGGACAGAGAGCTAAATCCATGAAGTTTGTGGACGGC
CTGATGATCCACAGCAGAGACCCCTGTTAACTACTACGTTGACACTGCTGTGCGCCATGTGTTGCTCAGACAGAGT
GTGCTGGGCATCAAGTGAAGATCATGCTGCCCTGGGACCCAAAGATGAGATAACTGCCACCAACCCCATCTCA
GAACAGAAGGGTGGGA

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FIGURE 2046

MNEFLTQELAEDGYSGVEMRVTPTRTEIIVLATRTQNVLGEKGRRIRELTAVVQKRFGSPEGSVELYAEVATRG
LCAIAQAESLPYKLLGGLAVRRACYGVSRFIMETGAKGCEVVVSGKL

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FIGURE 2047

ATGACCAGGTTCAICATCGCCTCTCTCCTCCCCCTCTACCTTTCTCCCTGGTTTCCATAGAGCAGAAAATCTGGGTC
AAGGTGGAGTGCATTGGATCAAGAGTTGCTATGATTTGGGAAAAGCTCTGCAGGATAAGTCGAATAAAATCAGAC
CTTGCAGAACTCAATCTGGCCCTGGGAACCTCCGGTGTGGAGCTGGAGGAAAAACCAGTACAGTACTCTCTC
AGGAAAACAAGCTCAGAGGCGGAATCAACAAGACAGCTGACGAACACATCCTCTTCAAGAGAGGCCAGGGTCTCA
AGCTCAAGTGGCCAAGGC AAGACGGGTCAAAGTCAGAGTGGTGGTCACAGTCCCTGGAGGTGGCAAGAAGGATGAC
AAGGACAAGAAAAAGAAATATGAACCTCCTGTACCAACTGGAGTGGGGAAAAAGAGAAAAACAAAAGGATCAGAT
GTTGCCAGCAAACTGCCACTGGAATCGGGAACAAATGGAACCATAGAAAGAAAAGCAAGAGGAGGAAAGATCAAA
GGTGGACGATCTGAGGGGACCCCGATGT CAGTAGGAACCTTGGAAAGAGATCAATGACAGTCATGCCATCGTGTCT
ACATCTGTGGGCTCAGGACACTACGCCAACATTCTTTCAITTTGTAGACAAGGATCTGCTGGCAACTGGCTGCTCA
GTCTTGTCTCAATCACAAGGTGCATGCCATGAGAGGGGTGCTGATGGATGACGTGGATCCCTTGGTCACAGTGATG
AAGGTGGAAGGTCCCCCAGGAGACCTATGCCAATACTGGGAGGTGGATAATCAAATTCAGGAAATTAAGGAA
TCTGTGGAGCTTCTCTCACCCATGCTGAACATTATGAAGAGATGGGTATAAAGCCTCCTAAGGGGTCATTCTC
TAGGTCCACCTGGCATAGTTAAAAACCTTGCTAGCCAAAGCGGTAGCAAACCAACCTCAGCCACTTTCTTGAAA
GTGGTTGGCTCTGAACCTTATTCAGAAGTACCTAGGTGATGGGCCCAAACCTTGACGGGAATTGTTTCAAGTTGCT
GGAGAACATGCACCATCCATCGTGT TTA CTGATGAAACTGACGCCATTGGGACAAAAAGATATGACTCAAATCT
GGTGAAGCTGGTCTGATGGCCTTAAGAGAACGTAGAATGAAAGCAACAAATGAAGACTTCAAAAAATCTAAAGAA
AATGTTCTTTATAAAGAACAGGAAGGCACCCCTGAGGGGCTGTCTCTCTAG

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FIGURE 2048

MSVGTLEEINDSHAIVSTSVGSGHYANILSFVDKDLLATGCSVLLNHKVHAMRGVLMDDVDPLVTVMKEKVPQE
TYANTGRLDNQIQEIKESVELPLTHAEHYEEMGIKPPKGVILYGPPIVKITLLAKAVANQTSATFLKVVGSELIQ
KYLGDGPKLVRELFQVAGEHAPSIVFTDETD AIGTKRYDSNSGEAGLMALRERRMKATNEDFKKSKENVLYKKQE
GTPEGLSL

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FIGURE 2049

GGGGGGCTCGGGCTGGGGGCGCGGCTGTGCCGGCCGCCACCCCTCCTTGCATAAAAGCCGGAGCCCGGGGGC
CGGCGCTCTCAGCCCGTCGGTTCCTGAGCGCCTTCCCGGTGACCCCGCAGTGGGTGTGTGAGGGGAGGACGGACA
GACCCAGACGCCCGGACCAGGAGGACGCTGACGAGGCACCATGCGTGAGATCGTGACATCCAGGCGGGCCAG
TGCGGCAACAGATCGGCGCCAAGTTTTGGGAGGTCATCAGTGATGAGCATGGGATTGACCCCACTGGCAGTTAC
CATGGAGACAGTGATTTGCAGCTGGAGAGAATCAATGTTTACTACAATGAAGCCACTGGTAACAAATATGTTCTCT
CGGGCCATCCTCGTGGATCTGGAGCCAGGCACGATGGATTTCGGTTAGGTCTGGACCATTGGCCAGATCTTCAGA
CCAGACAAATTCGTGTTGGCCAGATGGAGCCGGGAATAACTGGGCCAAGGGCCACTACACAGAGGGAGCCGAG
CTGGTCGACTCGGTCTGGATGTGGTGAGGAAGGAGTCAGAGAGCTGTGACTGTCTCCAGGGCTTCAGCTGACC
CACTCTCTGGGGGCGGCACGGGGTCCGGGATGGGCACCTGCTCATCAGCAAGATCCGGGAAGAGTACCCAGAC
CGCATCATGAACACCTTCAGCGTCATGCCTCACCCAGGTGTCAGACACGGTGGTGGAGCCCTACAACGCCACC
CTCTCGGTCCACCAGCTGGTGGAAAAACACAGATGAAACCTACTGCAATTGACAACGAGGCCCTGTATGACATCTGC
TTCCGCACCTGAAGCTGACCAACCCCACTACGGGGACCTCAACCACCTGTGTGCGCCACCATGAGCGGGGTC
ACCACCTGCCTGCGCTTCCCGGGCCAGCTGAACGCGAGACCTGCGCAAGCTGGCGGTGAACATGGTGCCCTTCCCT
CGCCTGCACTTCTTCATGCCCGGCTTCGCGCCCTGACAGCCGGGGCAGCCAGAGTACCGGGCGCTCACGGTG
CCCGAGCTCACCCAGCAGATGTTGCACTCCAAGAACATGATGGCCGCTGCGACCCGCGCCACGGCCGCTACCTG
ACGGTGGCTGCCATCTTCGGGGCCGATGTCCATGAAGGAGGTGGACGAGCAGATGCTCAACGTGCAGAACAG
AACAGCAGCTACTTCGTGGAGTGGATCCCCAACACGTGAAGACGGCCGTGTGCGACATCCCGCCCGCGGCGCTG
AAGATGTCGGCCACCTTCATCGGCAACAGCACGGCCATCCAGGAGCTGTTCAAGCGCATCTCCGAGCAGTTACAG
GCCATGTTCCGGCGCAAGGCCCTTCCTGCACTGGTACCGGGCAGGGGACATGGACAGATGGAGTTACACGAGGCC
GAGAGCAACATGAACGACCTGGTGTCCGAGTACCAGCAGTACCAGGACGCCACGGCCGACGAAACAGGGGAGTTT
GAGGAGGAGGAGGCGAGGACGAGGCGTAGATGCCCGCGAGACGGGTTAGGGAAGCGGAGGAGGAAAGCGAG
GGGGTGGGGGCTTCCCGGACGATAACCTGGCAGTGGAGGAAAGAGCATGGTCTACTTTAGGTGTGCGCTGG
GTCTCTGGTGCTCTTCACTGTTCGCTGTCACTTTTTTTTCTTTTTTTGTAATATTGATGACATCAATGTAACAT
TTGAGATATTCTGAATTACTGTTGTAATGGCTAAATCACATAAACGTTTGTGTCGG

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FIGURE 2050

GCCCGCCGGTCCACGCCGCGCACCGCTCCGAGGGCCAGCGCCACCCGCTCCGCAGCCGGCACCATTGCGCGAGATC
GTGCACATCCAGGCGGGCCAGTGCGGCAACCAGATCGGCGCCAAGTTTTGGGAGGTATCAGCGATGAGCATGGG
ATCGACCCACAGGCGAGTTACCATGGAGACAGTGACTTGCAGCTGGAGAGAAACAACGTGTACTACAATGAGGCT
GCTGGTAACAAATATGTACCTCGGGCCATCCTGGTGGATCTGGAGCCTGGCACCATGGACTCTGTGAGGTCTGGA
CCCTTCGGCCAGATCTTCAGACCAGACAACCTTCGTGTTGGCCAGAGTGGAGCCGGGAATAACTGGGCCAAGGGC
CACTACACAGAGGGAGCCGAGCTGGTCGACTCGGTCTCGATGTGGTGAGGAAGAGTCAGAGAGCTGTGACTGT
TCTCAGGGCTTCCAGCTGACCCACTCTCTGGGGGGCGGCACGGGGTCCGGGATGGGCACCCCTGCTCATCAGCAAG
ATCCGGGAAGAGTACCCAGACCGCATCATGAACACCTTCAGCGTCATGCCCTCACCAAGGTGTGAGACACGGTG
GTGGAGCCCTACAACGCCACCTCTCGGTCCACAGCTGGTGGAAAAACAGATGAAACCTACTCCATTGATAAC
GAGGCCCTGTATGACATCTGCTTCGCGACCCCTGAAGCTGACCACCCCACTACGGGGACCTCAACCACCTGGTG
TCGGCCACCATGAGCGGGGTCAACACCTGCCTGCGCTTCCCGGGCCAGCTGAACGCAGACCTGCGCAAGCTGGCG
GTGAACATGGTGCCCTTCCCTCGCTGCACCTTCTTCATGCCCGGCTTCGCGCCCTGACCAGCCGGGGCAGCCAG
CAGTACCGGGCGCTCACGGTGCCGAGCTCACCCAGCAGATGTTGCACTCCAAGAACATGATGGCCGCTGCGAC
CCGCGCCACGGCCGCTACCTGACGGTGGCTGCCATCTTCCGGGGCCGCGATGTCATGAAGGAGGTGACGAGCAG
ATGCTCAACGTGCAGAAACAAGAACGACGACTACTTCGTGGAGTGGATCCCCAACACGTGAAGACGGCCGTGTGC
GACATCCCGCCCCGCGGCTGAAGATGTCGGCACTTCATCGGCAACAGCAGCGCCATCCAGGAGCTGTTCAAG
CGCATCTCCGAGCAGTTACGGCCATGTTCCGGCGCAAGGCCCTTCCTGCACTGGTACACGGGCGAGGGCATGGAC
GAGATGAGTTACCGAGGGCCGAGAGCAACATGAACGACCTGGTGTCCGAGTACCAGCAGTACCAGGACGCCACG
GCCGACGAACAAGGGGAGTTTCAGGAGGAGGAGGGCGAGGACGAGGCTTAAAAACTTTCAGATCAATCTGTCAT
CCTTAGTGAACCTCTGTGTGCTCAAGCATGGTCTTCTACTTGTAAACATATGGTGTCTCAGTTTTGCCTCTGTTA
GAAATTCACACTGTTGATGTAATGATGTGGAACCTCTTAAAAATACAGTATGTTCTGTGAAGGTATCTATACT
AATAAAAAAGCATGTGTAG

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FIGURE 2051

MREIVHIQAGQCGNQIGAKFWEVISDEHGIDPTGSYHGDSDLQLERINVYYNEAAGNKYVPRAILVDLEPGTMDS
VRSGPFGQIFRPDNFVFGQSGAGNNWAKGHYTEGAELVDSVLDVVRKESESCDCLQGQQLTHSLGGGTGSGMGTL
LISKIREEYPDRIMNTFSVMPSPKVS DTVVEFYNAITLSVHQLVENTDETYSIDNEALYDICFRTLKLTTPITYGDL
NHLVSATMSGVTTCLRFPQQLNADLRKLAVNMVFPRLHFFMPGFAPLTSRGSQQYRALTVPELTQQMFDSKNMM
AACDPRHGRYLTVAATFRGRMSMKEVDEQMLNVQNKSSYFVEWIPNNVKTA VCDIPPRGLKMSATFIGNSTAIQ
ELFKRISEQFTAMFRRKAF LHWYT GEGMDEMEFTAESNMNDLVSEYQQYQDATADEQGEFEEEEGEDEA

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FIGURE 2052

CCGCGTTCTGCGGACCGCGCCTGCCCCCTGCGCGCTCCGCCCTGCGCGCGACCGCACGCCCGCGCGGGAC
ATGGCACACGACCGGCACGCTGCCCCAGCGCCCGGGCTCCGGGACGCGAGATGGGCAAGCCAGGAACGTG
GCGCTCATCACCGGTATCACAGGCCAGGATGGTTCTTACCTGGCTGAGTTCTGCTGGAGAAAGGCTATGAGGTC
CATGGAATTGTACGCGGTCCAGTTCAATTAATACGGGTGCAATTGAGCATCTGTATAAGAATCCCCAGGCTCAC
ATTGAAGGAAACATGAAGTTGCACTATGGCGATCTCACTGACAGTACCTGCCTTGTGAAGATCATTAATGAAGTA
AAGCCCCAGAGATCTACAACCTTGGAGCCCAGAGCCACGTCAAATTTCTTTGACCTCGCTGAGTACACTGCG
GACGTTGACGGAGTTGGCACTCTACGACTTCTAGATGCAGTTAAGACTTGTGGCCTTATCAACTCTGTGAAGTTC
TACCAAGCCTCAACAAGTGAACTTTATGGGAAAGTGCAAGGAAATACCCAGAAAGGAGACCACCCCTTTCTATCCC
CGGTACCCCTATGGGGCAGCAAACCTCTATGCCTATTGGATTGTGGTGAACCTCCGTGAGGCGTATAATCTCTTT
GCAGTGAACGGCATTTCTCTTCAATCATGAGAGTCCCAGAAGAGGAGCTAATTTTCGTTACTCGAAAAATAGCCGG
TCAGTAGCTAAGATTTACCTTGGACAACTGGAATGTTTCAGTTTGGGAAATCTGGATGCCAAACGAGATTGGGGC
CATGCCAAGGACTATGTGGAGGCTATGTGGTTGATGTTGCAGAAATGATGAGCCGAGGACTTCGTTATAGCTACT
GGGGAGGTCATAGTGTCCGGGAATTTGTCGAGAAATCATTCTTGCACTTGGAAAAACCATTTGTGTGGGAAGGA
AAGAATGAAAATGAAGTGGGCAGATGTAAGAGACCGGCAAAGTTCACGTGACTGTGGATCTCAAGTACTACCGG
CCAACCTGAAGTGGACTTTCTGCAGGGCGACTGCACCAAAGCGAAACAGAAGCTGAACTGGAAGCCCCGGGTGCT
TTCGATGAGCTGGTGAGGAGATGTTGTCACGCCGACGTGGAGCTCATGAGGACAAACCCCAATGCCTGAGCAGCG
CCTCGAGGCCCGGCCGCCCTCCGGCTACAATCCCCGCAAGTCTCCGGTGCAGACGCGCTGCGGGGATGGGGAG
CGGCGTGCCAACTCGCGGGTCCCTGCGGCCCTGCTGCCGCTGCGCTGTCGCCGCCGCAAGAGCGGGGCCGCC
CGCCGAGGTTTGTAGCAGCGGGATGTGACCTCCAGGGTTTGGGTGCGCTTTGCGTTTGTGCAAGCCTCCTTGA
ATGGCTTTGTGAATCAAGATGTTTTAATCAATTCATTTACTTGAAATTATGTTGTTACACAACAAATTTGTG
GGCCTTCAAATGTTTTTC

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FIGURE 2053

MAHAPARCPSSARGSGDGEMGKPRNVALITGITGQDGSYLAEFLLKGYEVHGI VRRSSSFNTGRIEHLYKNPQAH
IEGNMKLHYGDLTDSTCLVKIINEVKPTEIYNLGAQSHVKISFDLAEYTAADVGVGTLRLDDAVKTCGLINSVKF
YQASTSELYGKVQEI PQKETTFFYPRSPYGAALKYAYWIVVNFREAYNLFVAVNGILFNHESPRRGANFVTRKISR
SVAKIYLGQLECFSLGNLDAKRDWGHAKDYVEAMWMLQNDPEDFVIATGEVHSVREFVEKSFLHIGKTIWVEG
KNEVEVGRCKETGKVHVTVDLKYYRPTEVDFLQGDCTKAKQKLNWKPRVAFDELVREM VHADVELMRTNPNA

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FIGURE 2054A

CGCCGCGGCCCGGTACCAACGGGTGGTCTCGCCGAGGGAGCTGTCGTGCCCTCGTGGTCCCGGGACTGCAGTGGTG
TGCGCTCTCGGCCGCGTGGCGCTAGGCATGGCGATGGATCAAGTAAACGCCCTGTGCGAGCAGCTGGTGAAGAGCGG
TGACGGTCATGATGGACCCCACTACCCAGCGCTACCGGCTGGAAGCCCTCAAGTTTTGTGAGGAGTTTAAAG
AAAAGTGTCTTATCTGTGTCCCTGTGGCTTGAGTGGCTGAGAAAAACAAAGTTGCCATCTGCAGACATTTTG
GCCCTCAGATCCTGGAACAGCTTGTCAAGTTTCGGTGGAAACGGCATGTCTCGATTGGGAAGGTGTATCTGAAGA
ACAGTGTCTAGGAGCTGATTGCAACTGGAACTTGAACATTTTGAAGAGGAGAACCATATTAAAGATGCTCTGT
CTCGAATTGTAGTGGAAATGATCAAGCGAGAGTGGCCACAGCATTGGCCTGACATGCTAATAGAATTGGACACTC
TTTCCAACAAAGGGGAACACAGACAGAATTGGTGTATGTTTATCCTTTTGCGACTGGCAGAGGATGTAGTGACTT
TTCAGACACTTCCCCCTCAAAGAAGAAGGGACATCCAGCAAAACATTAAACCAGAACATGGAAGGATCTTCAGTT
TTCTGCTTAAACACTTCAAGAAAAATGTAACAAAGTATCAGCAAGTGAAGACAGATACTTCTCAGGAGTCAAAGG
CGCAAGCAAACTGTGCAGTAGGAGTTGCAGCACTGAATACTCTAGCAGGCTATATTGACTGGGTGTCTATGAGTC
ACATCACTGCTGAAAACGTAAACTCTCGAGATACTGTGTTTGCCTGTTGAATGAACAGAACTTCAGTTGGGAG
CCGCTGAGTGTCTTCTCATTCGAGTCAGCAGAAAAGGCAAGTTGGAAGACCGGACCCCTTGTATGGTCTTATTTG
GAGATGTTGCCATGCATTATATACTCTCGCCGCGACAGACTGCTGATGGAGGAGGTTTGGTAGAAAAACACTACG
TCTTTCTGAAGAGGCTCTGTGAGGTGTGTGTGCGCTGGGCAATCAGCTGTGTGCATTGCTGGGTGCAGATTCTG
ATGTAGAAAACACATCAAACTTTGGAAAAATACCTGGAACTCTTTCTGCTTCAACAACCCATCAAAGTCAGTTTC
TACGCTCTTCAACTCAGATGACTTGGGAGCCCTCTTCAGGCATGAAATCCTGTCCCGTGATCCTTGTCTATTAG
CAATAAGTCAAAAATATCTTGTGCTCCATGACTAACTTGGTCAAGATGGGCTTCTCTTCAAAACAGCAACC
CTAGCTGTGAATATCTCGSTTTGATTTTGATAGCGATGAGGACTTCAATGGCTTTCTTCAACTCTCCCGAGCAC
AACAAGGAGAGGTGATGAGGTTGGCATGTCTTTGGATCCCAAACTAGCTTCCAGATGGCTGGGAGTGCGCTAA
AGTATCAACTATCAACTTTCTTGTATGCTGTTCTGTGACTTGAACCTGGAGTGAAGAGGAAAC
TCTGTTCGCTCTTCTCACTTCAATTCGTGCACTGGGAAGCCATGACTCTTTTTTGGAAAGTGTTATACCCAGA
TGTTTGAACACATAAATAGAGAAGAAATCTCTGTTAATGATGGAATAGAGCTATTGCAGATGGTTCTGAACTTTG
ATACCAAGGATCCCTCATCTCTGTCTGTGCGCTTACTAATGTCTCTGCACTCTTCCATTGTCACTTACAGAC
CAGAGTTCTCTGCCCAGGTCCTCTCTAAGCTATTTTCATCTGTGACTTTTGAAGATCTGTGAAGAAAGTAAAGGCC
CCAGAACC CGGCGAGTGAGGAATGTGAGGAGGCATGCTTGTCTCCATCAAGATGTGTGCTGACTACCCCC
AGCTTGTGCTGCCCAATTTGACATGCTTTATAACCATGTAAGCAACTCCTCTCCAATGAGCTACTCTGACAC
AAATGGAGAGTGTGCCCTCATGGAAGCCCTGGTTCATATTAGCAACCAATTAAGAACTACGAGCGCTCAGAAGG
TGTTCTTAGAGGAGCTGATGCCACAGTGGCCACGATCTGGCTTCTCAAGACATGACAGAGTCTGTAGATG
TGTATGCTTTTATTGCGTATGTGGGTACAGATCAGAAGAGCTGTGACCCAGGCTGGAGGATCTCGTGTGGCTTAA
ACCTGTCAGCAATGAGCTTTTGTGTATACAGCATCTGGGTGTGGTGAAGCAACTCTGTGCCCACTGACCTTA
AAGAGGCCAAAGCTGGGGATTGTGGTGGGTATACATCCAGTGGAAATCCAATCTTCGTAAACCCCTGCACAG
AGCAGATTTCTGAACTCTTGACAAATTTGCTTGGCTTATAAGAACCCACAATACATTATATGACACAGAAATGC
TAGCCAAATGCGCAGAGCCTTTCACCAAGGCTCTGGATATGCTTGACGCGGCAAGAAATCTGCTATATTAGGATC
CTCAACCTCTCTTGAAGATCAATGACTCTCTGTCTTCAAACCCGCTTGGAAAGATGCAGCGTTCCTCTCTTA
CCCTCTATGAAAACGTGTTTTCATATCTTAGGGAAGGAGGCCCTTCCATGCAGCAAGACTTCTATCTGTGAGG
ACCTTGTCTACCCAGCTTCTCAGCTCAGCCTTTGTCAACTTGAACAAATTTCTGACTACCGACTCAGACCCATGCT
TTGCGGCTTTTGTAAAGCCTCTGGTGTCTTCTGTGCCCCAGACACTATGAAGCCCTGGATCCCCATCTCTG
GACCTCTTTTCACTTCTCCATATGAGGCTTTCTCAGAAATGGCAAGTTATCAACCAAGAGAGCTGTGTGTG
GAGAAGATGAGGCTGCAGATGAAACCCAGAGTCTCAAGAGATGCTGGAGGAGCAACTGGTGAGGATGTTAACC
GAGAAGCTATGACCTAATCACGGTTTGTGTGTTCAAAGAAGGTGCTGACCACAGTATGTCCTCCCGCAGC
ATGGAGACGATGAAGAAATGATGGCCACAGAGGTACCCCTCAGCTATGCAGAGCTTGCAGACCTGGGCAAT
GTCTGATGAAGCATGAGGATGTTTGTACAGCGCTATTAATACAGCCTTCAATTCCTCGGCTGGAAAGATAC
TGCTCTGCCAGGACACCTCAGCTCTGTCTGGCTCTCCTTCAACCAAGTGCTGTCAAGGACACTGCTCGCAG
ATGCAGTTACGTGGCTTTTCAACAGTGTGTGTAAGGCTTACAGATGCACGGGCACGACGCGGTGCTGGCTT
CCCTGTCCATCTGGCCTTCCAGATATACGAGGCACTGCGCCCGAGGTACCTGGAGATGAAGAGTGTATGAGGAG
AAATCCTTGAATACGAAGGACTCTGGACAGTTTGAAGTCAAGCTTGAATACCCCTCCCTGCAGAAAGTGG
CTGACAGCGCCGAAGGACCAATTCAAAGCCTCATTGCTGTGTCATTGGGAAACCTCTGGGAGAGCAGTTCC

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FIGURE 2054B

GAAAAGAAGTTCACATTAAGAATCTTCCCTCACTTTTCAAAAAACAAAGCCAATGCTGGAGACGGAGGTGCTGG
ACAATGATGGGGGTGGCCTGGCCACCATCTTTGAACCTGAATCAAGCTTTTGGGCATCCTTCTCGGCCCTTCT
TGTCATCTCTTTTCCCTTTGTAGCCGATCTTAGGCCCTTCTTGCACTGCCACCTCACTTTCCACCACGTGCA
GCCTGGAAAGAGATCCAGGTCTGGAGCTGGAGAGAACAGGCCCTGTGCAGGACCAGAAGTAATTATACTAAAGTA
TCAAGAAAGGGAGTTAGGGCTTAAACTATTCTGTCTAGATGTCCCAGATAGTTCACCTTCACTTGGAGATTG
CTTTTCCAAGAAAAGCTAGAGCAGAGCAGCCCTTCTCCACAAGCCCTCCACCCCGGTGCAGCCACATACCTGT
ACAGAATGGTAACTAAGGGTGCTGTGCCAACCTTGCCTGACTAGCAAGGCTCGCAGCAAGACACAGCCCTCAACT
ACTTGTGCCAGAGTTTCTCTTGGACCACTCCAACCTCCCACTGAGCCCTTTTGTCTGCTGGGTGGCAGGAACTTT
CCCCACTCCCTAAGGGGCATGTCTGGGTAGGTGCTAAGTGTGAAGAGAAGTGGTCAGTTCTCTCAACTTTGC
TTTGGGCAAGAACTCTGGTCACCTGATGGGATCCATGGTACAGGCTACTGTCAAACCTGGCACAGTATCAAGTATA
GTACCTCCAAGGACCAGGGCTGGGCAGTCTTTAGTGCTAACATCCCTTTAGAGTTCACACATCTTGCCCTTCCA
TGAATGACCCCTCAGTCTGGCTCCCGAGCCTCAAGGTCCACTCAGGCACAAGAGCCACAGTACCTAGATAGTG
TCACATGACACCGTTGTATCCAAAGGATAATACAGACCAACTAGGCTACATCTGTGATGAGCAGCTAGCAAGGCC
GCTGGTCTTCTCCTAGGACTAAGTCCAGGTGCCTTCCACAATCTCATGGTCTTTTCAGGTCCCTGGTTACTTTTCT
CAAAGGCCATTTCCAAAAAATACATGCCTTCACATCACAACCTGTACTGTAGTCCATTCTAGAGGTCACTGAA
AGGCCCTGTAAAGAGAGGACATGGATACGGGACCTGGCCCTGAGGTTATTACTGGCCGTAAAGCAGAGTTAATCC
ATACAGAAACCAAGTGTGTCCATGTGCTCTGCACAAAAACAGACCTGTTGTCCATCCAGTCCACTGACAGAGGGT
TTCCCCGAGAGCCGAAGTGGACTGAAGCTACAGTTTTTGTAGTGGTGGCGGCCACAGGCAGGGTCAGATTGAGAAG
AAGCAAAGCTGGGGAAGCAGAAGTTGGGAGTCTTGTGTTGCTCCCTTCTCCTGTGGGTGCTCTGGGTTTCTGTG
GATCGTGAAGCGATCTCAAGAGTGTTCCTCCAAACCTGATAGCTGCCTATTCTGTCTGGTGGGGCTGTGG
AGGATGTAGTTGATTTTATTGCAATTGTAATATTTTAAACATCCTGTGACTTCATGCTAGAAATTTCTATTGTTT
ATAGAAACTTTTTGTAGAAACATTAACTCTAAAGCACATCTGCATGTCAAGTAAAATCTCAGTTTCGTACAG

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FIGURE 2055

MAMDQVNALCEQLVKAVTVMDFNSTQRYRLEALKFCEEKCEKCPICVPGLRLAEKTQVAIVRHFGLQILEHV
KFRWNGMSRLEKVVYLNKSMELIANGTLNILEEENHIKDALSRIVVEMIKREWPQHWPDMLELDTLSKQGETQT
ELVMFILLRLAEDVVTFQTLPPQRRRIQQTLTONMERIFSFLNLTQENVNKYQQVKTDTSQESKAQANCRVGV
AALNTLAGYIDWVSMSHITAENCKLLEILCLLLNEQELQLGAACECLLIIVSRKGLKLEDRKPLMVLFGDVAMHYIL
SAAQTADGGGLVEKHYVFLKRLCQVLCALGNQLCALLGADSDVETPSNFGKYLESLAFITTHPSQFLRSSTQMTW
GALFRHEILSRDPLLLAIIPKYLASMTNLVKMGFPKTDSPSCYEYSRDFDSDDFNAFFNSSRAQQGEVMRLA
CRLDPKTSFQMAGEWLKYQLSTFLDAGSVNSCSAVGTGEGSLCSVFSFVQWEAMTLFLESVITQMFRTLNRREE
IPVNDGIELLQMVLFNFDTKDPLILSCVLINVSALFPFVTYRPEFLPQVFSKLFSSVTFETVEESKAPRTRAVRNV
RRHACSSIIKMCRDYPQLVLPNFDMLYNHVKQLLSNELLLTQMEKCALMEALVLSNQFKNYERQKVFLLEELMAP
VASIWLQDMHRVLSVDVAFIAYVGTDAQSCDPLGLEDPCGLNRARMSFCVYSILGVVKRTCWPTDLEAKAGGFV
VGYTSSGNPIFRNPCTEQILKLLDNLLALIRTHNTLYAPEMLAKMAEPFTKALDMLDAEKSAI LGLPQLLLEND
SPVFKTVLERMQRFSTLYENCFHILGKAGPSMQQDFYTVEDLATQLLSSAFVNLNNIPDYRLRPLMHVFKPLV
LFCPPEHYEALVSPILGPLFTYLHMRLSQKWQVINQRSLLCGEDEAADENPESQEMLEEQLVRMLTREVMDLITV
CCVSKKGADHSSAPPADGDDEEMMATEVTPSAMAELTDLGKCLMKHEDVCTALLITAFNSLAWKDTLSCQRTTSQ
LCWPLLLKQVLSGTLADAVTWLFTSVLKGQLMGQHGDGCMAASLVHLAFQIYEALRPYLEIRAVMEQIPEIQKDS
LDQDFDCKLLNP SLQKVADKRRKQDKFRLIAGCIGKPLGEQFRKEVHIKNPLSLFKKTKPMLETEVLDNDNGGGLAT
IFEP

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FIGURE 2056

AAAAACCAAAATGGCGGATGACGCCGGTGCACTGGGGGGSCCTGGAGGCCCTGGTGGCCCTGGGATGGGGAACCG
CGGTGGCTTCCGCAGAGGTTTCGCCAGTGGCATCCGGGGCCGGGGTCGCAGCCGTGGACCGGGCCGGGCTGAGG
CCGCGGAGCTCGCGGAGGCAAGGCCAAAGATAAGGAGTGGATGCCCGTCACCAAGCTGGGCCGCTTGGTCAAGGA
CATGAAGATCAAGTCCCTGGAGGAGATCTATCTCTTCTCCCTGCCATTAAAGGAATCAGAGATCATTGACTTTTT
CCTGGGGGCTCTCTCAAGGATGAGGTTTTGAAGATTATGCCAGTGCAGAAGCAGACCCGTGCTGGCCAGCGCAC
CAGGTTCAAGGCGTTTGTGTCTATCGGGGACTACAGTGGCCACGTCGGTCTGGGTGTTAAGTGCTCCAAGGAGGT
GGCCACCGCCACCCGTGGGGCCATCATCTGGCCAAGCTCTCCATTGTCCCGTGACACAGAGGCTACTAGGGGAA
CAAGATCGGCAAGCCCCACACCGTCCCCTGCAAGGTGACAGGCCGCCGTGGCTCTGTGCTGGTGCGCCTCATCCC
TGCACCCAGGGGCACTGGCATTGTCTCCGCACCTGTGCCCAAGAAGCTGCTCATGATGGCTGGTATCGATGACTG
CTACACCTCAGCCCCAGGGCTGCACTGCCACCCTGGGCAACTTCGCCAAGGCCACCTTTGATGCCATTCTTAAGAC
CTACAGCTACCTGACCCCCGACCTCTGGAAGGAGACTGTATTACCAAGTCTCCCTATCAGGAATTCACCTGACCA
CCTCGTCAAGACCCACACAGAGTCTCTGTGCAGCAGACCAGGCTCCAGCTGTGGCTACAACATAGGGTTTTTA
TACAAGAAAAATAAAGTGAATTAAGCGTG

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GGGCTGCGCTCTCCAGCTTGGCTATGGCCACGCGCCGAGATGAGGAGGGAGAACTAGGGGCGCCGAGCGCT
GGGAATTTCCGTCGCCCCCAAGTCGGGATGCTCATCTCAAGATCTCAGCAGGCCCCCTGAGGAGGGAGCTGTCA
CGACGGGAAACCGAGAACCACTCATCATGACCAACCTGACAGCTCAGGACAGTACAAGCTGTCTTGCGT
TATCTCTCTCATGCTGGGCTGGGAACGCTGCTCCGTCGGATTAATTTTTCATGACGGCCACTCAGTATTTCAACAA
CCGCGTGGACATGTCCAGAATGTGCTCTTGTCATGCTGAATGACAGGAGCCCGGAGCGCTCAGCGCCCA
TGCAGCACCTTGCTGCTGAGCGGAATCTCTCAGTGCCATCTTCAACAATGTGATGACCCATATGTCCTATGCTGC
CGTGCGTTATTACCACTACTCAACTCTCTTCTGTCATCAGAGATCCCCGACTCCGTCAGCGATCTGGGACGCT
GGTGCCCATCTCGTCTGCTGTCTTCTGATACATGCCATCTCTGTGAAGGTGACGCTGGATGCTCTGCTCCCTTTGT
CATCACCATGATCAAGATCGTGCTCATTAATTCATTGGTGCCATCTGTCAGCGGACGCTGTTTGTGCTGCTGCG
CCTTCTGCTCGCCAGCTACACGCGCCGACTCATGATGGTGGCCAGGCGCTAGCAGGCTCTTTGCGCTCCGTGGCCAT
GATTCGCGTATTGCGAGTGGCTCGGAGCTACAGAAGTGCCTTGCGCTACTTATCACAGCGTGTGCTGTTAT
CATTTTGACCATCATCTGTATCTGGGCTGCGCGGCTGGAATCTACCGCTACATACAGCAGACTCAAGCTTGA
AGGACCGGGGAGCAGAGAACCAAGTTGGACCTTATTGCAAAAGGAGGAGGCCAAGAGCAGGCAAGGAATC
TGGAGTTTCAGTCTCCAATCTCAGCCACCAATGAAAGCCACTCTATCAAAGCCCTCTGAAAAATATCTCAGT
CTTGCGTTTCTCTGCTGCTTCATCTCATCTACCAATGGGATGTCTTTCAGCGCGCTAGCTGTGAGGTCAAAGT
CAGCATCGAGCGAGCAGCATCGGGAAGCTTACTTATCTCTGCTGTCTGCTGTCTTGACTTCAATATCTTTGA
CTGGTTTGGGCGGAGCTCAGAGCTGTGCTGTGCTGGCTGGGAAGGACAGCGCTGCTGCCAGCGCTGCTGCT
GGCCCGGCTGGTGTGTTTGCCACTGTGCTGTGTGCAACTTAAGCCCGCGCTACCTGACTGTGCTTCTTGA
GCACGATGCTGGTTCATCTTCTCATGGCTGCTTTGCTTCTCAGCGGCTACCTCGGCGGCTCTGCAATGTG
CTTCGGGCCCAAGAAAGTGAACCAAGCTGAAGCAAAACCGCAGGAGCACTGATGCCCTCTTCTGTGCTGCTGG
TCTGGCACTGGGGGCTGTGTTCTCTCTGTTCTGGGCAATGTGTGACAAAGGATGGACAGGAAGCATGCTGT
CCTCCCTCCCTGTCTGCCCTCTGCCCTTCTCTGCGAGGGGTGATCTTGAGTGGTCTGGCGGTTTTTCTCT
AAGTGACTTCTGCTTTCCACGGCGTGTGCTGGGCGCGGATCTCAGCGCCCTGGGAGGGAGCTCTGGAGCGCA
GTGGGGAGTGTGGGTTTTGGGGCTCAGAGTCAGGAGCGGGGTGTAGCTCGGCATTGCCTGAGTTTCTCCAC
TCTTGCTCTGACTGATCCCTGCTGTGTGCGGCCAGTGGAGGCTTCTGGGCTTGGAGAACAGCATGTGCTCTGT
TATGTGCTGTGTGCTCGGCTCGGCTGTCTGACAGTGTGCTGCTGCTGGGTGGCTAGGAGCTGGGTCTGAC
CTGTGTATGGTTGAGCTGATATCTCATTCTCCCTGGCGCTCTCTCTCTGTGTTCTCTCATGTGCCCTCT
CAACTCCCCATGCCAATCTTACCACATCATGCACCTGTACAGTTGCACAGTCTAGCTCCTTTTTAAAAATATA
TTTGACGAAGAACAGGTGCTCTCAGAGCGTCTCTGATTTAAATAAACCTTTCTGTTTTTTTT

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FIGURE 2058

GC GCGGCACTTCCGCTGGCCGCTGGCTCGCTGGCCGCTCCTGGAGGCGGCGGGAGCGCAGGGGGCGCGCGC
CCGGGAGCTCGCATTCCCCGGTTCCCCCTCCACCCACGCGGGCTTGGACCATGGACGCCAGATGGTGGGCAGTGG
TGGTGTCTGGCTGCGTTCCCCCTCCCTAGGGGCAAGTGGGGAGACTCCCGAAGCCCTCCGGAGTCATGGACCCAGC
TATGGTTCTCCGATTGTGGTGAATGCTGCTGGCTATGCCAGCTTATGGTACCTGGCTACCTCATGGTGCACT
ACTTCAGGCGGAAGAATACTACCTGGAGACCGGTAGGGGCCCTCTGCTTTCCCTGGTGAAAGCTTGTGTGTTGGCA
ATGAGCCCCAAGGCTCTGATGAGGTTCCCTGGCGCCCCGAACAGAGCGGCGAGAGACCACCCGATGTGGCAGG
CCCTGAAAGTGTCTTCTGTGCCACAGGGCTCCAGGTGTCTTATCTGACTTGGGGTGTGCTGCGAGAAAGAGTGA
TGACCCGCACTATGGGGCCACAGCCACATCACCGGGTGAGCGCTTACGGACTCGCAGTTCTGGTGCTAATGA
ACCGAGTGCTGGCACTGATTGTGGCTGGCCCTCTCTGTGTTCTCTGCAAGCAGCCCCGGCATGGGCAACCCATGT
ACCGGTACTCCTTTGCCAGCCTGTCCAATGTGCTTAGCAGCTGGTGCCAATACGAAGCTCTTAAGTTCGTGAGCT
TCCCAACCCAGGTGCTGGCCAAAGGCTCTAAGGTGATCCCTGTCTGCTGATGGGAAAGCTTGTGTCTCGGCGCA
GCTACGAACACTGGGAGTACCTGACAGCCACCTCATCTCATTGGGGTCAGCATGTTTCTGCTATCCAGCGGAC
CAGAGCCCCGCACTCCCCAGCCACCACTCTCAGGCTCATCTTACTGGCAGGTTATATTGCTTTTGACAGCT
TCACCTCAAACCTGGCAGGATGCCCTGTTGCTATAAGATGTATCGGTGCAGATGATGTTTGGGGTCAATTTCT
TCTCTGCTCTTTCACAGTGGGCTCACTGCTAGAACAGGGGGCCCTACTGGAGGGAACCCGCTTCATGGGGCGAC
ACAGTGAGTTTGTGCCATGCCCTGCTACTCTCCATCTGCTCCGCATGTGGCCAGCTCTTTCATCTTTACACCA
TTGGGCAGTTTGGGGTGCCGCTCTTACCATCATCATGACCTCCGCCAGGCTTTGCCATCCTCTTTCTCTGCC
TTCTCTATGGCCCACTGTCACTGTGGTGGGAGGGCTGGGGTGGCTGTGGTCTTGTGCTGCCCTCCTGCTCAGAG
TCTACGCGCGGGGCCGTAAAGCAACGGGGAAAGAGGCTGTGCCGTGTTGAGTCTCCTGTGCAGAAGGTTTGAG
GGTGAAAGGGCTGAGGGGTGAAGTGAAATAGGACCCCTCCACCATCCCTTCTGCTGTAACTCTGAGGGAGC
TGGCTGAAAGGGCAAAATGCAAGGTGTTTCTCAGTATCACAGACCAGCTCTGCAGCAGGGGATTGGGGAGCCAG
GAGGCAGCCTTCCTTTTGCTTAAAGTCAACCATCTTCCAGTAAGCAGTTTATTCTGAGCCCGGGGGTAGACAG
TCCTCAGTGAGGGGTTTTGGGGGAGTTTGGGGTCAAGAGAGCATAGGTAGGTTCCACAGTTTACCTTCCCAAGT
TCCCTTAAGCTTGGCCTAGCTGTGCTCTGCCACCTTCCAGACTCACTCCCTCTGCAAAATACCTGCATTCTTA
CCCTGGTGAGAAAAGCAAGCGGTGTAGGCTCCAATGCTGCTTTCCAGGAGGGTGAAGATGGTGTGCTGTA
GGAAAGGGGATGCAGAGCCTTGCCAGCACCAACCTCCTATGCTCCTGGATCCCTAGGCTCTGTTCATGAGC
CTGTGCAAGTTTTGGTACTTTAGAAATGTAACTTTTTGTCTTATAATTTTATTTTATTAATAATTAATTACTGC

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FIGURE 2059

CAGAATCGGTAGACATTGCGRACCAGGTTATGAAGTGCAAGGCTGCAGTTGCTTGGGAGGCTGGAAGGCTCTCT
CCATAGAGGAGATAGAGGTGGCACCCTCAAAGGCTCATGAAGTTCGAATCAAGATCATTGCCACTGCGGTTTGCC
ACACGACGCTATACCCTGAGGGGAGCTGATCCTGAGGGTTGTTTCCAGTGATCTTGGGACATGAAGGTGCCG
GAATTGAGGAAAGTGTGGCGAGGGAGTTACTAAGCTGAAGGCGGGTGACACTGTATCCACITTTACATCCAC
AGTGTGGAGAATGCAAAATTTGTCTATATCTCTAAAACCTAACCTTTGCCAGAAGATAAGAGTCACTCAAGGGAAAG
GATTAAATGCCAGATGGTACAGAGATTACTTGCAAGGGAAGACAATTTTGCCTTACATGGGAACAGCACAT
TTTCTGAATACACAGTTGTAGCTGATATCTCTGTGTCTAAATAGATCCTTTAGCACCTTTGGATAAACTCTGCC
TTCTAGGTTGTGGCATTTCAGCTGGTGATGGTGCTGCTGTGAACACTGCCAAGGTGGAACCTGGCTCTGTTTGTG
CCGTCTTTGGTCTGGGAGGAGTTGGATTGGCAGTTATCAAGGGCTGTAAAGTGGCTGGTGCATCCCGGATCATTG
GTGTGGACATCAATAAGATAAAATTTGCAAGGGCCAAAGAGTTTGGAGCCACTGAATGTATTAAACCTCAGGGTT
TTAGTAAACCCATCCAGGAAGGGCTCATTGAGACGACTGATGGAGGATGGACTATTCTTTGAATGTATTGGTA
ATGTGAAGGTCATGAGAGCAGCACTTGAGGCTTATCACAAGGGCTGGGGAGTCAGCGTGGTGGTGGAGTAGCTG
CTTCAGGTGAAGAAATGCCACTCGTCCATTCAGCTGGTAACAGGTCGCACATGGAAGGAAGTGCCTTTGGAG
GATGGAAGAGTGTAGAAAGTGTCCAAAGTTGGTGTCTGAATATATGTCCAAAAAATAAAAGTTGATGAATTTG
TGACTCACAATCTGTCTTTTGGTGAATTAACAAGGCTTTCAACTGATGCATTCTGGAAGAGCATTGCAACTG
TTGTAAGATTATTAATTCAAAAGAGAAAAATAATGTCCAACCTGTCGTGATGTATGGGAGCAGCTTAACAGGCAG
GGAGAAGCGCTCCAAACTCACAGCTCGTAGAGCTTCGCAGCTACCCAGAGAATAGTGTATTAGTGTAATTC
ATGAATCTCTATAATCAACGACAAGGATAAATTCAGTCATGGACCTGTTTCTGGACGCTCCTCCACATAAATAAT
TGCTAGCTTATTAAGGAATATTTTAACATAATAAAAGTAATTTCTACATTTGTGTAGAAATGTCTTTGTTTTAT
GCTGTAAATCATTGTCTGTTTGTCTGCCATTATCTTCATTCTGTGAAGGGAATGTAAGGAAGCAGGGCAGTG
GTGGGTGCTGGAACCTCAGAAACATTGTTGAAGTTTGAAGGCTCAGTCCCGTGAATTGAAGAACAGATCTG
AGCCATCAGTGACAAAGTTAATCAGGAGCCAAGTCTGCTTCTGTGATATTATCTTGAAGGGAGGTAAGTGTGCCCT
GTTCTGCTGCTGTACCCCAAATTCCTAGTATGGCATCTGCCCTCAGGGGACACTAAAATGTATTATTGAAACAGC
ATTCTGGACTTAATAGGTGTATGTGTGTGTTGGTGTGGCTGACTATTTCTAGTATAGTGAATTACATACTGA
ATATCCAAGTTCTCAGCACCTACTTTTGTCAAATCTTAACATTTTGCCACTTCCACATCACATTTGCCATTCCTCC
CCTCCAGAGGTAACAAATTAACAAAATTTGATGTTTGTCACTCTGTGTTGTTGACTTTCACTGTGTATTAACCT
AAACCATCTACTCTTTAGTACTGTTTTATATATTTTAAAGCTTTAATCTTGTCTACTTTACAGCTTTTCTTTTT
TCACTCATTATTGTATAATTATATGTGAAGCTTTCATTCATTAAATTTTAGTACTGTGTAGCAGTATCAATTACG
CGAAGCTATCTTAATTCATCTGTTCTCCAGTTGAAGGCATGAAGTTGTGCCAGTTTCTGTATTACAACACTGTAG
TGGAACATTTCTGCAATTGGGCTCACTACATTAGTTACTTAAAGATGTGTATCAGAAATAAACACATTAGCCCT
TATAGACATTTGCCAAATTTATCTCAAAGTAAATGTGAGTTTTTGTGAATTACGTGAGTGTAGAAATGTTGTTTA
TTATGAGTTTAGTTGCATTTTCCACA

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FIGURE 2060

ATGATCAAGGGTGTACACTAGGCTTCATTACAAGATGAGATCTGTGTATGCTCACTTCCCATCAACGTCGTT
ATCCAGGAGAAATGGGTCTCTTTGTTGAAATCCGAAATTTCTTGGGTAAAAATACATCCGCAGGGTTTGGATGAGA
GCAGGTGTTGTTTGTTCAGTATCTCAAGCCGAGAAAGATGAATTAATCCTTGAAGGAAATGACATTGAGCTTGTT
TCAAATTGAGCGGCTTTGATTCAACAAGCCACAACAGTTAAAAAGAAGGATATCAGGGAATTTTGGATGGTATC
TATGTCTCTGAAAAAGGAAGTGGTCAGCAGGCTGATGAATTAA

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FIGURE 2061

MIKGVTLGFHYKMRSVYAHFPINVVIQENGLVEIRNFLGKKYIRRVWMRAGVVCSVSQAQKDELILEGNDIELV
SNSAALIQQATTVKKKDIREFLDGIYVSEKGTGQQADE

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FIGURE 2062

GCTGTCGGTCCACGCCGCCGTCGCGCTGCCGCCCGCTCGGCGTCGGCCGCCGCCATGGGAGTGCACGTGGAAA
CCATCTCCCAGGAGACTGGCGCACCTTCCCGAAGCGCAGCCAGACCTGCGTGATGCACTACACCGGGATGCTTG
AAGATGGAAAGAAATTTGATTCTCCCGGGACAGAAACAAGCCCTTTAAGTTTATGCTAGGCAAGCAGGAGGTGA
TCCGAGGCTGGGAAGAAGGGGTTGTCCAGATGAGTGTGGGTGAGAGAGCCAACTGACTATATCTCCAGATTATG
CCTATGGTGCCACTGGGCAACCAGGCATCATCCACCACATGCCACTCTCGTCTTCGATGTGGAGCTTCTAAAAC
TGGAATGACAGGAATGGCTCCTCCTTAGCTCCCTGTTCTTGATCTGCCATGGAGGGAICTGGTGCCTCCAGA
CGTGTGCACATAAATCCATATGGAGCTTTTCTGATGTTCCACTCCACTTTGTATAGACATCTGCCCCAACTGAA
TTATTCTCCAAGTTGAGAGATGTCCTGGGTAAATTAAAGCCCTACCTAAAAC TGAGGTGGGATGGGAGAG
GCTTTGCC

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FIGURE 2063

MGVHVETISPGDWRTFPKRSQTCVMHYTGMLEDGKKFDSSRDNRKPFKMLGKQEVIRGWEEGVVQMSVGQRAKL
TISPDYAYGATGHPGIIPPHATLVFDVELLKLE

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FIGURE 2064

CGCCTTGGCCATTTCGCCAGCCACACAACCCAGGACCTCCAATGGGGACGCCCACTGAGGATCTAGTGGTTGCTC
TTTTCTTGTCTCTTTCTTTCCCCCACTCTTTCCTTGTTCTATCATGGGCAATTTCCCGCCTTCCATCCCCTCTT
TCTTCTGTCTGGCTTGTGTCTCAGAAACCTCAAACCTTTCACCTTGCAACCAATCTAAAGGCTAAACGCTCTAA
TTTTTTTCTGTAAACGCTCTGGCCCCAGTATAAATTAGAAAATGGCGCTCAGTGGCCAGAAAACGCACTTCCA
ATTTCTCTATTTTGTGGGACTTAGACAACCTTCTATGGAATAATGGGCAATGGGTCTGAGGTACCTACTTCCAG
GCATTTTTTACATACGATCTCTCCCTAGCCTATGCTTCCAATGTAATCCATCCCAATTTTCTTATTTCCCTTC
TGCTACCCCTCCTTCTTCCACTGGCGATGCTGACTCCTCTTTGTCTGTTGACCCCTCCGATCTTTCTCCCCAC
CACCTATCCGAACCTGCTCTTAATTTCTCCCCAGAACCTATTTCTACCCACAATCCACCTCTTATGCCCTCCC
ATTACACCCCTTCTCTACATCTCTATGGCTTACAGTTTGGGCTGCGACCAACCCCAAGGCCCTGCCTAGCAA
TTTCCCTCGGAGAGGTGGCAGGAACCAAGGAATAGTTCGGGTTACGGTCCCTTCTCCCTGTTGACCTTTC
CAAATTAGTGAACATCTAGGCTCTTTCCCATCTGACCCCAACAAATATATACGAGAATTCCAATACTTAACCCAG
TCCTATAATCTTACTTGGAAATGACTTAAATGTATCCTTACCTCTACCCCTCGCTCCTGAGGAGTGAGAGTGGGTT
TGGATCCTAGCTCAATCTTAGGCTGATAACCGCGGTGCGGTAAGCCTGGCCTCCAGTAAGGTGCTAGGGCAGTA
CCCTGTGAAGACCCCGGATGGACTTACCAAGGCCCTGGGACCAATGCATAGCCAGGCGGGACTACATGATCTCTTG
CCTAGTTTAAAGGGCTTCGAAGGCTGCATATAAAGCCGCTCAATTATGACAACTAAAAACAACAAACAAACAA
AAAAAACCACTCAGAACRAAGATAAAAAATCCAGCTCAGTTTATGGCCTGTCTACCTGCCACCTCAGGCGATATA
CAGCACTAGACCTTGAAGGATAGAAGGCCGCTTATTTCTTAACATGCATTTTATTACCAAGTCAGTTCTTGACA
GTAGAAAGAACTTCAAAAATTAGAGTCTGGCTCTCAGATCCCAACACAGGAATTAATCAACCTCGCCTTCAAGG
TGTTCAATAATAGGGAAGAGACTGCCCGGCGACAGCGCATTTTCAAGACTACAGATGCTTGCCTCCGCCATAAGAC
AAACCCCAAGCTGCACTGCCTACCTGCAAGAACTTCAAGGCATCTAAACGCACATCCAACAGCCCTCTGGGACT
TTGCTTCAAGCGATGAAAACCTGGCCACTGGGCAAGGAATGCCTGACGCTGGGATTTCTCTTAAGCCATGCCCC
GCCTGTGCGTCCCTCACTGGAAGTCTGACTGCCGACTCTCATCGCCACTTCCGGAGCTCCTGGAGCTCAAACCC
AAAGCTCCCCACGCACTCCTTCCAGATCTCCTCGGCTTGGCGGCTGAAGACTGACGCTGCCGCAACCTCTCGGA
GGCCCCCTTAGACAATCGCGGATGCCGAGCTTCCGGTAACTCTTAGGGTGGAGGCATAAAAGACAGGAATGTAAAG
GTCTCTGAGCAGGCGGCGCATGGTCAAGCCATCGTGACCCCTGTGACTCACACGTACACATCCAGAAGGTCTC
CTGGAGCCAGAAAGTCTGGGACGACAGGAAACCAAAAGAGAAAAA

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FIGURE 2065

GGGCTTGGACGCTTTGGCAACCGCTACTCCCGGGGGTGTCTTTTCTGACAGGACGAAGTGCACCTATGCTAGTG
GCGGGTCTGGAAGCCTAGAGGGGAACAGGCTGACAGAGCCGGGCCAAGGGATTAGCGCGGGCGCGGGGCATGGC
CTGGACTGCGCGGGACCGCGGGGCCCTGGGGCTGCTGCTGTTGGGGCTCTGCTTGTGCGCGCTCAAAGAGGTCC
CCCGGGTGAGCAGGGTCTCCCGGGCTCCGGGCCCTCGAGTTCAGGCATCGATGGCATCGACGGTGACCG
AGGTCTCAAGGGCCCCCGGGCCCCCGGGTCTGACAGGTGAACCGGGAAGCCAGGAGCTCCAGGCAAGCCTGG
CACACCTGGCGCTGATGGATTAAAGGACCTGATGGATCCCTGGCTCCATTGGGTCAAAGGGACAAAAGGAGA
ACCTGGTGTGCTGATCGCGTGGATTTCAGGCCGTGGTATTCTGGACCCCCCTGGTCTCTGGGACAGCAGG
ACTCCTGGAGAGCTTGGCCGTGTAGGACCTGTTGGTGACCTGGGAGAAGAGGACCCCTGGCCCCCTGGCCC
CCCAGGACCCAGAGGAACAATTGGCTTTCATGATGGAGATCCATTGTGTCCAAATGCCTGTCCACAGGTGCGCTC
AGGATATCCAGGCCTACCAGGCATGAGGGGTCTAAAGGGGCTAAAGGAGAAATTTGGTGAACCAAGGAAGCAAGG
ACACAAGGGTGAAGAAGGTGACCAAGGAGAACCTCGGAGAAGTTGGAGCTCAAGGACCTCCAGGAGCCCCAGGGTTT
GCGAGGCATCACCGGCATAGTTGGGGACAAAGGGGAAAAAGGTGCTCGGGGCTTAGATGGTGAACCTGGGCCCTCA
GGGTCTTCTGGTGCACCTGTGTATCAAGGACAGCGAGGACCTCCAGGAGAAGCAGGTCCCAAAGGAGATAGAGG
GGCTGAAGGTGCTAGAGGAATTCCTGGTCTCCTGGGCCCCAAGGAGACACGGGTTTGCCAGGTGTGGATGGCCG
TGATGGGATCCCTGGAATGCCTGGAACAAGGGTGAACCAAGGAAACCTGGGCCCTCTGGTGATGCAAGATTGCA
GGGGTTACCAAGGTGTACCTGGAATTCCTGGTGAAAGGGTGTGCTGGTGAAGAGGTAGCACAGGTGCTCCAGG
GAAGCCTGGTCAGATGGGAATTCAGGCAAAACCGGCCAACAGGGGCTCCAGGAGAGGTGGGACCCCGAGGACC
CCAGGGGCTTCTGGCAGTAGAGGAGAATTAGGACCAGTGGGATCCCAAGGCCTACCAGGTAACCTGGSTTCTCT
GGGTAGCCCTGGCCTCCTGGCTTGCTGGGCCCCCTGGACTTCTTGGAATGAAAGGTGACAGGGGTGTAGTCGG
TGAACCGGGTCCAAAGGGTGAACAGGGTGCTCTGGTGAAGAAGGTGAAGCAGGAGAAAGGGGGGAACCTGGAGA
TATAGGATTACTGGCCCCAAAGGATCTCAGGTAATCTCGGGGAACCTGGCTTGAGAGGGCTTGAGGGAAGTCG
GGGGCTTCTGGAGTGAAGGACCAGAGGACCACTGGACCCCGGGGTGTGACGGGAGAAGGGGTGCACCCGG
CTGCTCTGGTGTCCAGGGCCCTCCGGGTAGAGCACCACAGATCAGCACATTAAAGCAGGTTTGCAATGAGAGTCA
ACAAGAACATTTTGTCTGAGATGGCTGCCAGTCTTAAGCGTCCAGACTCAGGTGCCACTGGGCTTCTGGAAGGCC
TGGCCCTCTGGTCCCCCGGCCCTCCTGGAGAGAAATGGTTTCCAGGCAGATGGGAATTCGTGGCCTTCCGGG
CATTAAAGGGCCCCCTGGTGTCTTGGTTTGAAGGGACCTAAAGGTGACTTGGGAGAAAAGGGGGAGCGTGGCCCC
TCCAGGAAGAGGTCCCAACGGTTTGCTGGAGCTATAGGTCTCCAGGTGACCCAGGCCCTGCCAGCTATGGCAG
AAATGGCCGAGACGGTGAGCGAGGCCCCCCAGGGGTGGCAGGAATTCCTGGAGTGCCTGGACCCCGGGACCTCC
TGGGCTTCCCGGTTTCTGTGAGCCAGCCTCCTGCACATGCAAGGTGGTCAAGCAGCATTTAAACAAAGGGCCTGA
CCCTTGAAGGGCTTACTGCTGCATGGCTGTCTGCATGAACACGCTGGTGAAGGAGCCTGGGTGAGAAACACCA
TCCAAGATGGGCAAGATGATTACCTTCAGCATGATTACAAATGATTACCTTCAGATGATTACAGAGTCTCT
ACTTGACAAATCACATAGAAAGAACGGTGCTATTAGTAAGTCTCTTCTTCCCTTGGAGGGAAGACAGCAG
AGTCATCAGTTAAAAAAGAAAAACCAACCTCCCTTGAATAAATTTATCTCCTGTTCCCAAGGATCT
TGAGCTTTAGTGTGCTATACCTATGTGTCTTATCGTGGGCCACTGTGCCAATAAACAACCAACTGTTTGGTTT
ACCTC

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FIGURE 2066

GGCCGCGCCCTGCAGATTGTCICTTGTGCGTAAGTTTTTTTGACCGTCACTCGTGTACAGCTTCAAAGTCAGATA
GATTTTTTCGCCAGCATGTTCTACTTCCGAGGCTGTGGCCGTTGGGTGCGGGTTCCCTTCAACAAGCAGCAATTT
CGGTTGGCAGGGTTGAGCAGTGCAGCGCGCGCCCCGAGCTCCGCACCTTCGACGTGATAGTCATTGGTGGAGGA
CATGCCGGGACTGAGGCAGCCACGCGCGCGCTCGGTGCGGCTCTCGGACTCTGCTCTCACTCACC GCGTGGAC
ACGATCGGTGCAGATGTCATGTAATCCTTCTTGGTGGCATCGGAAAGGACATTTAATGAGGGAAGTAGATGCC
TTGGATGGCCTGTGTTCTCGCATCTGTGACCACTCTGGTGATACATTAAGAATTAATAACCGCGCTAAGGGACCA
GCTGTGTGGGGTCTGAGAGCTCAGATTGATAGGAACTCTACAACAGAACATGCAGAAAGAAATCTTGAATACA
CCACTGCTTACTGTTCCAGGAGGAGCTGTAGAAGATCTTATCTTACAGAACAGAGCCTGAACACATCTGGGAAA
TGCCGTGTCACTGGGGTTGTTTTGGTGGATGGAAGCACAGTATATGCAGAGAGTGTGATTCTGACTACTGGGACA
TTTCTGAGAGGCATGATTGTAATTGGATTGGAGACGCATCCAGCAGGACGTTTAGGGGATCAGCCTTCTATAGGA
TTGGCTCAGACACTGGAGAAGTTAGGGTTTGTGGTGGGAAGGTTGAAGACTGGGACTCCACCCCGAATTGGCCAAA
GAGTCCATTAAATTCAGTATTTCAAACAAGCATATACGGGACAATCCATCCATACCATTCAGCTTTACCAATGAG
ACAGTATGGATTAAAGCCAGAAGATCAGCTGCCATGTTACTTGACTCACACCAACCCATAGATGGATGAGATTGTC
CTTAAGAACCTTCACTTAATAGTCATGTTTAAAGAAACGACAAGAGGACCTCGATACTGTCCCTCCATTGAATCA
AAAGTTTTGCGGTTTTCCAAACCGCTCTACATCAGGTTTGGTTGGAACCTGAAGGAATGGATTCTGACCTTATCTAC
CCACAGGGGTTATCTATGACGCTACCAAGCTGAGTTACAAGAGAAATGATCAGATGCATCAGAGGCTTGGAGAAA
GCTAAAGTGAATCAGCCAGACGGAGTTTGTCTTGTGTCGACAGGATGGAGTGCAATGGTGGCATCTCGGCTCAC
CACAACTCCCCTGCCAGGCTACGGTGTTCAGTATGATTACTTAGATCCCCGTGAGATCAACCCCTTCTTGGAG
ACTCATTTGGTTCAACGACTCTTCTTGTGTGACAGATCAATGGCACCACTGGTTATGAGGAAGCTGCAGCTCAA
GGTGTGATAGCGGAATCAACGCCAGTCTTCGGGTCACTCGCAAGCCTCCCTTGTGGTTAGCCGAACAGAAAGT
TACATAGAGAGCTTTGATTGATGACCTCACTACTCTGGGCACCACTGACCATACCGCATGTTTACCAGCCGATGA
GAGTTCGGTTTGTCACTGCGCCCTGATAATGCTGACAGCCGCTCACACTCGGAGGGTATAAAGACGCTGGCTGT
GTGTCCCAACAACGATATGAAGAGCTTGTGGATGAAGTCTTCTTTAGAGAAGGCAATTTCTGTGTTGAAATCT
ATTGAGTTTTGTAGCTCTAAATGGAAAAAATTAATCCAGAGGCTTCTATAAGTACTAGTAGAAGTCTGCCTGTC
AGAGCTCTCGATGTTCTGAAGTATGAGGAAGTTGACATGGATTCTTAGCCAAAGGCTGTCCAGAGCCCTTGAAG
AAGTACTAAATGTGAGAGAGCTGGCTGAAGAGCTGAAATAGAAGCCACTTATGAATCAGTGTGTTGCCATCAA
CTACAGAAAAATAAGGGAGTTCAAGCAAGATGAAGCTCTCCAAGTGCCAAAAGACCTAGATTATTGACTATCAGG
GATGTGCTCTTGTCCCATGAAGTTTCAGAGAAAACTACATTTTAGTCGTCACAGACGATCGGGGCTGCTAGTCGC
ATACCCGGAGTAACACTGCGCCCATCAATCTGCTGAGATTGTGGAAGACCACTCAACGAAGACAGCTCGGCT
ATGAATGAATCATCCAAGACTGATCAATACTTATGTGATGCAGACAGACTCAAGAGAGAGAGTTATAGCTTTTCA
ATTCATAAAGATTTTTAAAGAGCATATAAATAATTTGATCAATACAAACAGTATAGATAAAGAATTTATTAGCA
CATGTTTAAATAGCTTTATTAGGTTTACTATGGGTTTGCCATTAAATTTCTGAGTGGGACAGAAATTAATTTGTGC
TTTTTCTGTATATGAAAAAATAGTCGTAACAATTTGACTCTTTCTTTAAGGAGCTGTAAATCAAAATAACTT
TGTGCAGTGTTCTACAAGAGAGAGCACTGAACCTAAAACCTGAACCTGGAATCAACATCAAGATCAGATTGCG
CTACTCATAGGGACTTTGCCTATTAAGTCTACCAAATTAAGTCTTATCATTCAGCGTGTTTTGAGAGTTAATA
ATCTTTTGTGTTTACTAGGCTAGGAAGCAATATCAAGCCCTTAAATTTCTCAAGACTAAAGACTTGAGATT
ATATAAATAATCCAGAAATCATTCAGCTAATACTATTGGAATATAGTATGAGGGTGAAAGTTGACAGAAATCTG
TACTCTTCAGGAAATCTCTCACTGGTAATTTGTTTGAACATTAATGAAGCCCTATAAATAAGAAAGATTGGAAA
TCACCATTGTTTCTTATTATCCACAGTGTGGATGGATCTATTGTTGGTACCTAGTATTGGGAGAATTGAGTAAC
GTTAGTTATTTTATATCATACCAATAAATAATTTTC

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FIGURE 2067

MFYFRGCGRWVAVSFTKQQFPLARLSSDSAAPRTPHFDVIVIGGGHAGTEAATAAARCGSRTLTLTHRVDTIGQM
SCNPSFGGIGKGHLMREVDALDGLCSRICDQSGVHYKVLNRRKGPAVWGLRAQIDRKLYKQNMQKEILNTPLLTV
QEGAVEDLILTEPEPEHTGKCRVSGVVLVDGSTVYAESVILTTGTFLRGMIVIGLETHPAGRLGDQPSIGLAQTL
EKLGFVVGRKLTGTPPRIAKESINFILNKHIPDNPSIPFSFTNETVNIKPEDQLPCYLTHTNPRVDEIVLKNLH
LNSHVKETTRGPRYCPSESIVLRFPNRLHQVWLEPEGMDSDLIYPQGLSMTLPAELQEKMITCIRGLEKAKVIQ
PDGVLLLLPRMECNGAISAHHNLP LPGYGVQYDYLDP RQITP SLETHLVQRLFFAGQINGITGYEEAAQGV IAG
INASLRVSRKPPFVVSRT EGYIGVLIDDLTLTGTSEPYRMFTSRVEFRLSLRPDNADSR LTLRGYKDAGCVSQQR
YERACWMKSSLEEGISVLKSI EFLSSKWKKL IPEASISTSRSLPVRALDVLKYEVDMDSLAKAVPEPLKYYTKC
RELAERLKI EATYESVLFHQLQEIKGVQQDEALQLPKDL DYLTIRDVSLSHEVREKLHFSRPQTIGAASRI PGVT
PAAIINLLRFVKTTQRRQSAMNESSKTDQYLC DADRLQEREL

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FIGURE 2068

CTCATTTAACTTTTTTAATGGGTCTCAAAATTCGTGACAAATTTTGGTCAAGTTGTTCCATTAAAAAGTACT
GATTTTAAAAACTAATAACTTAAACTGCCACACGCAAAAAAGAAACCAAAGTGGTCCACAAAACATTCTCCTT
TCCTTCTGAAGGTTTTACGATGCATTGTTATCATTAAACAGTCTTTTACTACTAAACTTAAATGGCCAATTGAAA
CAAAACAGTTCTGAGACCGTTCTCCACCAGTGATTAAAGAGTGGGTGGCAGGTATTAGGGATAATATTCAATTAG
CCTTCTGAGCTTTCTGGGCAGACTTGGTGACCTTGCCAGCTCCAGCAGCCTTCTGTCCACTGCTTTGATGACAC
CCACCGCAACTGTCTGTCTCATATCACGAACAGCAAGCGACCCAAAGGTGGATAGTCTGAGAAGCTCTCAACAC
ACATGGGCTTGCCAGGAACCATATCAACAATGGCAGCATCACCAGACTTCAAGAATTTAGGGCCATCTTCCAGCT
TTTTACCAGAACGGCGATCAATCTTTTCCTTCAGCTCAGCAAACTTGCATGCAATGTGAGCGGTGGCAATCCA
ATACAGGGGCATAGCCGGCGCTTATTTGGCCTGGATGGTTCCAGGATAATCACCTGAGCAGTGAAGCCAGCTGCTT
CCATTGGTGGGTCAATTTTGTCTGTCAACAGCAACGTTGCCACGACGACACATCCTTGACAGACACATTTTGACAT
TGAAGCCACATTGTCCCCAGGAAGAGCTTCACTCAAAGCTTCATGGTGCAITTCGACAGATTTTACTTCCGTTG
TAACGTTGACTGGAGCAAAGGTGACCACCATACCGGTTTGAGAACCAGCTCTCCACTCGGCCAACAGGAACAG
TACCAATACCACCAATTTTGTAGACATCCTGGAGAGGCAGGCGCAAGGGCTTGTGAGTGGACGAGTTGGTGGTA
GGATGCAGTCCAGAGCCTCAAGCAGCGTGGTTCCACTGGCATTGCCATCCTTACGGGTGACTTTCATCCCTTGA
ACCAAGGCATGTTAGCACTTGGCTCCAGCATGTTGTCAACATTCCAACAGAAATTTGGCACAATGCTACTGTGT
CGGGGTTGTAGCCAATTTTCTTAATGTAAGTGCTGACTTCCCTTAACAATTTCTCATATCTCTTCTGGCTGTAGG
GTGGCTCAGTGGAAATCCATTTTGTAAACACCGACAATTAGTTGTTTCAACCCAGTGTGTAAAGCCGAAGGGCAT
GCTCTCGGGTCTGCCCATTTCTTGGAGATACCACTTCAAATTCACCAACACCAGCAGCAACAATCAGGACAGCAC
AGTCAACCTGAGATGTCCCTGTAATCATGTTTGTGATAAAGTCTCTGTCTCGGGGCATCAATGATAGTCACAT
AGTACTTGCTGGTCTCAAATTTCCACAAGGAGATATCAATGGTGATACCAGCTTACGCTCAGCTTTCAGTTTAT
CCAAGACCCAGGCATACTTGAAGGAGCCCTTCCCATCTCAGCAGCCTCCTTCTCAAATTTTCAATGGTTCTTT
TGTGATGCCACCGCATTTATAGATCAGATGGCCAGTAGTGGTGGACTTGCCGAATCTACGTGTCCAATGACGA
CAATGTTGATATGAGTCTTTTCCTTTCCCATTTTGGCTTTTAGGGGTAGTTTTCACGACACCTGTGTTCTGGCGG
CAAAACCG

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FIGURE 2069

ACGGGTTTGCCGCCAGAACACAGGTGTCGTGAAAACTACCCCTAAAAGCCAAAATGGGAAAGGAAAAGACTCATA
TCAACATTGTCGTTCATTGGACACGTAGATTGCGGCAAGTCCACCACTACTGGCCATCTGATCTATAAATGCGGGT
GCATCGACAAAAGAACCATTGAAAAATTTGAGAAGGAGGCTGCTGAGATGGGAAAGGGCTCCTTCAAGTATGCCT
GGGTCTTGGATAAACTGAAAGCTGAGCGTGAACGTGGTATCACCAATTGATATCTCCTTGTGGAAATTTGAGACCA
GCAAGTACTATGTGACTATCATTGATGCCCCAGGACACAGAGACTTTATCAAAAACATGATTACAGGGACATCTC
AGGCTGACTGTGCTGTCTGATTGTTGCTGCTGGTGGTGAATTTGAAGCTGGTATCTCCAAGAATGGGCAGA
CCCGAGAGCATGCCCTTCTGGCTTACACACTGGGTGTGAAACAACATAATTGTCGGTGTAAACAAAATGGATTCCA
CTGAGCCACCCCTACAGCCAGAAGAGATATGAGGAAATTTGTTAAGGAAGTCAGCACTTACATTAGAAAAATTGGCT
ACAACCCCGACACAGTAGCATTGTTGCCAATTTCTGGTTGGAATGGTGACAACATGCTGGAGCCAAGTGCTAACA
TGCCTTGGTTCAAGGGATGGAAGTCAACCGTAAGGATGGCAATGCCAGTGGAAACCACGCTGCTTGAGGCTCTGG
ACTGCATCCTACCACCAACTCGTCCAAGTGAAGCCCTTGCGCCTGCCTCTCCAGGATGTCTACAAAATTGGTG
GTATTGGTACTGTCTGTTGGCCGAGTGGAGACTGGTGTCTCAAACCCGGTATGGTGGTCACCTTTGCTCCAG
TCAACGTTACAACGGAAGTAAATCTGTGCAAAATGCACCATGAAGCTTTGAGTGAAGCTCTTCTCTGGGACAATG
TGGGCTTCAATGTCAAGAATGTGCTGTCAAGGATGTTCTGCTGGCAACGTTGCTGGTGACAGCAAAAATGACC
CACCAATGGAAGCAGCTGGCTTCACTGCTCAGGTGATTATCCTGAACCATCCAGGCCAAAATAGCGCCGGCTATG
CCCTTGATTGGATTGCCACACGGCTCACATTGCATGCAAGTTTGTGAGCTGAAGGAAAAGATTGATCGCCGTT
CTGGTAAAAAGCTGGAAGATGGCCCTAAATCTTGAAGTCTGGTGATGCTGCCATTGTTGATATGGTTCCTGGCA
AGCCCATGTGTGTGAGAGCTTCTCAGACTATCCACCTTTGGGTGCTTTGCTGTTCTGATATGAGACAGACAG
TTGCGGTGGGTGTCATCAAAGCAGTGGACAAGAAGGCTGCTGGAGCTGGCAAGGTCAACCAAGTCTGCCCAAGAAAG
CTCAGAAGGGCTAAATGAATATTATCCCTAATACCTGCCACCCCACTCTTAATCAGTGGTGAAGAAGCGGTCTCAG
AACTGT

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FIGURE 2070

CCGGCTCGCGCCCTCCGGGGCCAGCCTCCCAGAGCCTTCGGAGCGGGCGCGTCCAGCCAGCTCCGGGGAAACG
CGAGCCGCGATGCTTGGGGGGTGTCTCCGGGGGCCCGCGCGCGGGGACGGCGCTCTCGGCTGGCGGACTAGCG
CTGGTACTCTCGGCTGGGTCTCTCGTCTTCTCCACCTCCTCGGCATCCTCTTCTCTCTCGGCGCGTTC
CTGGCTTCCGCGGTGTCTCGCCAGCCCCGCTGCGGGACAGTGCCCCGCGCTGTGCGAGTGCTCCGAGGCAGCG
CGCAGAGTCAAGTGCCTTAACCGCAATCTGACCGAGGTGCCACGGACCTGCCCGCTACGTGGCGAACCTCTTC
CTTACCGGCAACCAGCTGGCCGTGCTCCTGCGGCGCCTTCGCCCCGGCGCGCTGGCGGAGCTGGCCGCG
CTCAACCTCAGCGGAGCGGCTGGACGAGGTGCGCGCGGGCGCCTTCGAGCATCTGCCAGCCTGCGCCAGCTC
GACCTCAGCCACAACCCACTGGCCGACCTCAGTCCCTTCGCTTTCGCGGAGCAATGCCAGCGTCTCGGCCCCC
AGTCCCCCTTGTGGAATGATCCTGAACCACATCGTGCCCCCTGAAGATGAGCGGCAGAACCGGAGCTTCGAGGGC
ATGGTGGTGGCGCCCTGCTGGCGGGCCGTGCACTGCAGGGGCTCCGCGCTTGGAGCTGGCCAGCAACCACTTC
CTTTACCTGCGCGGGATGTCTGGCCCACTGCCAGCCTCAGGCACCTGGACTTAAAGTAATAATTGCTGGTG
AGCCTGACCTAGGTGTCTTCCGCAACCTGACACATCTAGAAAGCTCCACCTGGAGGCAATGCCCTCAAGGTC
CTTCACAATGGCACCCCTGGCTGAGTTGCAAGTCTACCCCACTTAGGGTTTTCTGGACAACAATCCTGGGTC
TGCGACTGCCACATGGCAGACATGGTGACCTGGCTCAAGGAAACAGAGGTAGTGCAGGGCAAGACCGGCTCACC
TGTGCATATCCGAAAAAATGAGGAATCGGGTCTCTTGAACATCAACAGTGCTGACCTGGACTGTGACCCGATT
CTTCCCCCACTCCTGCAAACTCTTATGTCTTCTCGGGTATTGTTTACCCCTGATAGGCGCTATTTTCTCCTG
GTTTGTATTTGAACCGCAAGGGGATAAAAAAGTGGATGCATAACATCAGAGATGCTCGAGGGATCATATGGAA
GGGTATCATTACAGATATGAAATCAATGCGGACCCAGATTAACAACCTCAGTTCAACTCGGATGCTCAGAA
ATATTAGAGGACAGCAAGGACAACCTGTCATGAGATGAGACTTAAGCTTTATCCTACTAGGCTTGCTCCAC
TTTCATCCTCCTATAGATACAACGGACTTTGACTAAAAGCAGTGAAGGGGATTGCTTCTTGTATGTAAG
TTTCTCGGTGTGTTCTGTTAATGTAAGACGATGAACAGTTGTGTATAGTGTTTTACCCTCTCTTTTCTTGAA
CTCCTCAACACGTATGGAGGGATTTTTCAGGTTTCAGCATGAACATGGGCTTCTGTCTGTCTCTCTCTCAG
TACAGTTCAAGGTGTAGCAAGTGATCCACACAGATAGCATTCAACAAAAGCTGCCTCACTTTTTCGAGAAAA
TACTTTATTCATAAATATCAGTTTTTATTCTCATGTACCTAAGTTGTGGAGAAAAATATGTCATCCTATAAACTGC
CTGCAGACGTTAGCAGGCTCTTCAAAATAACTCCATGGTGACAGGAGCACCTGCATCCAAGAGCATGCTTACAT
TTTACTGTTCTGCATATTACAAAAATAACTTGAACCTTCATACTCTTTGACAAAGTAAATTACTTTTTTGAT
TGCAGTTTATAGAAATGTACTGATTTTTTTTTTAATAAAGTGCATCGAGATCCAACCGACTGAATTGTTAAAAA
AAAAAAAATAAAGATTCTTAAAGAA

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FIGURE 2071

MPGGCSRGAAGDGRRLRLARLALVLLGWVSSSSPTSSASSFSSSAPFLASAVSAQPPLPDQCPALCECSEAARTV
KCVNRNLTVEPTDLPAYVRNLFITGNQLAVLPAGAFARRPPLAELAAALNLGSRLEDEVRAFAFEHLPSLRQLDLS
HNPLADLSPFAFGSGSNASVSAPSPVLEILNHIVPPEDEQRNRSFEGMVVAALLAGRALQGLRRELASNHFLYL
PRDVLALQPSLRHLDLSNNSLVSLTYVSFRNLTHLES LHLEDNALKVLHNGTLAELQGLPHIRVFLDNNPWWCDC
HMADMVTNLKETEVVQGDRLTCAYPEKMRNRVLELNSADLDCDPIPPSLQTSYVFLGIVLALIGAIFLLVLY
LNRKGIKKWMHNIRDACRDHMEGYHYRYEINADPRLTNLSSNSDV

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FIGURE 2072

CCTGGAGGCCGGCTTGGCGGCCAGGCGCAAGTTCGCGACGTCACCCGATCCGACCCTGGTACCCGGAGCGGCCCT
GGCGCGGCTGTCGGCTGGCACCAGCTCCCTGCAGGAAGAGTGGAGAGGTTGTTCCCGCGGGGAGCGGGTACCGG
CCGCATCCCGGCCGACCAGGGAGCCTGGGCGCCGGCAGTTCGGCTGCTGGTGTTTAATGIGTGTITTTGGTCTT
CTCCCCAAGCAATGGAACAGAGTTCGCTGCTTCAGTGGTAAGTAGTACTTGCAATTCAAGTAACACTAACTTAAAA
TCTACTTTAGACACAGTGGGCATAGTATGAAAGAACCAAGAGGATTTCGGCTGTCTGGAGCTGATAATGCTG
CAAAACAAGCCATGATGAGATGTTCTCCACATTTACAAAATCCGGGAGACTGCGGATGGGCTGTGCCTGGAGGTG
GAGGGGAAATTGGTAAGTAGGACAGAGGGTAACATTGATGACTTGCTCATTGGTGGAAATGCCTCCGCTGAAGGC
ACTGAAAGCGAAGGCAAACTTGAAGAACAGAGACCAGAAAGAGTAAACCTTTTATGACAGGGGCTGCAGAACAA
ATCAAAACATCCTTGCTAATTTCAAAGCTACCACTTCTTTATTGGTGAACATGAATCCAGATGGCATGGTT
GCTCCACAGGACTACCAAATAGAAGTCAAGCTTCGGATGACACTGAAAGGTGTTTCAGGAGATTTTGGTTCCTACT
AGAAATAATGAAAATTTATGCCAAGAATAG

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FIGURE 2073

MCVFGLLPKQWKQSCCFSGSSSTCNSSNTNLKSTLDTVGDSMKEPRRISAVLELIMLQTSHEMFSHIYKIRETAD
GLCLEVEGKLVSRTEGNIDDLIGGNASAECTESEGLEEQRPERVKPFMTGAAEQIKHILANFKSYHFFIGENM
NPDGMVAPQDYQIEVQASDDTERCSGDFGSTRNNENLCQE

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FIGURE 2074

AGAGAGGAGCCGACTCGGCAGGGACTGGGGACCAGGCGCGAGAGTGCAGCGAGCGAGGGAGGGAGTGAGGGAGC
GTGCGAGCCAGAAAGGGGAAAGGCGGCCACTCGTGCTTGACGCGACCGCAGAGGGGAGTGGGAGCAGTGGGGTAAAG
GAGCGGGGGCGGGAATAAGAAAGGCCGAGAGAAGGCGGACAGAGGCTAGTGGTGGTGGTGGTGGAGGGGAGA
AGGAGGAGCTGGAGGAGGGCAGGGGCTGAGGGAGTGAGTGAAGCGGACGCGCGAGGGAGGGAGGGAAGGGAAGG
GAAGGGAAGGGGGGTACGCGGGGGCGCGCGCGCCACCGGGAGCGCGCTCGGAGGCGAGTGGAACTGGATCGG
GTTTGTGCGCAGCGGCGTGGAGCTTCGGCCGCCATTTTACAACAGCTCCACTCGCGCGGACACAGGGAGCAGCGA
GCACGCGTTTCCCGCAACCCGATACCATCGGACAGGATTTCTCGGCCCTCAGCCCCAACGGGGAGATCTCTGGAAC
ATGGCTACAGAACATGTTAATGGAATGGTACTGAAGAGCCCATGGATACTTCTTCGCACTTATCCATTACAGAA
AATTTTCAGACATTGCTTGTATGCTGGTTTACCACAGAAAGTTGCTGAAAAACTAGATGAAATTTACGTTGCAGGG
CTAGTTGCACATAGTGATTAGATGAAAAGAGCTATTGAAGCTTTAAAAGAAATCAATGAAGACGGTGCATTGGCA
GTTCTTCAACAGTTTAAAGACAGTGATCTCTCTCATGTTTCAAGAACAAAGTGCCCTTTTATGTGGAGTCATGAAG
ACTTACAGGCAGAGAAAAACAAGGGACAAAGTAGCAGATTCTAGTAAAGGACCGATGAGGCCAAAAATTAAG
GCACCTTTGGAAGAACAGGCTACACACTTGATGTGACCACTGGACAGAGGAAGTATGGAGGACCACCTCCAGAT
TCCGTTTATTCAGGTCAGCAGCCTCTGTTGGCACTGAGATATTTGTGGGAAAGATCCCAAGAGATCTATTTGAG
GATGAACCTGTTCCATTATTTGAGAAAGCTGGACCTATATGGGATCTTCGCTTAATGATGGATCCACTCACTGGT
CTCAATAGAGGTTATGCGTTTGTCACTTTTGTACAAAAGAACGAGCTCAGGAGGCTGTTAAACTGTATAATAAT
CATGAAATTCGTTCTGGAATAACATATTTGGTGCTGCACTCAGTTGCCAACATAGGCTTTTGTGGGCTCTATT
CCTAAGAGTAAAAACAGGAACAGATCTTCTGAAGAAATTTAGCAAGTAACAGAGGGTCTTACAGACGTCATTTTA
TACCACCAACCGGATGACAAGAAAAAACAAGAGGCTTTTGCTTTCTTGAATATGAAGATCACAACACAGCTGCC
CAGGCAAGGCGTAGGTTAATGAGTGGTAAAGTCAAGGCTCGGGGGAATGTTGGAAGCTTTGAAATGGGCTGATGCC
ATAGAAATCTGTATCCTGAGGTTATGGCAAGGTTAAAGTGCTGTTTGTACGCAACCTTGCCAAATACTGTAACA
GAAGAGATTTTAGAAAAGGCATTTAGTCAAGTTTGGGAACTGGAACGAGTGAAGAAGTTAAAAGATTATGCGTTT
ATTCATTTTGATGAGCGAGATGGTGCTGTCAAGGCTATGGAAGAAATGAATGGCAAGAGCTTGGAGGGAGAAAAAT
ATTGAAATTTGTTTGGCAAGCCACCAGATCAGAAAAGGAAGAAAGAAAGCTCAGAGGCAAGCAAGCAAAAAAT
CAAAATGATGACGATTACTACTATATGGTCCACCTCATATGCCCTCCCAACAGAGGTCGAGGGCGTGAGGAT
AGAGGTGGTTATGGATATCCCTCCAGATTATTATGGATATGAAGATTATATGATTTATTGTTTATGATTACCAT
AACTATCGTGGTGGATATGAAGATCCATACTATGTTATGAAGATTTTCAAGTTGGAGCTAGAGGAAGGGTGGT
AGAGGAGCAAGGGGTGCTGCTCCATCCAGAGGTCGTGGGGCTGCTCCTCCCCGCGGTAGAGCGCGTTATTCACAG
AGAGGAGGTCCTGGATCAGCAAGAGGCGTTCGAGGTGCGAGAGGAGGTGCCCAACAACAAGAGGCGCGGGGTA
CGTGGTGCGAGGGGTGGCGCGGTGGAATGTAGGAGGAAGCGCAAGCTGATGGGTACAACACGCGAGATCC
AAGCGCGCCAGACCAATAATCAGAACTGGGGCTCCCAACCATTTGCTCAGCAACCGCTCCAAGTGGTGATCAT
TCTGGTAACATAGTTTACAATCTGAAAACCCAGGAGTTTATCAGGATACTTTTGGGCAACAGTGGAAAGTAGAAA
CAGTAGGGGCTCTGTAATAATGGAGACTGATAGTTGATCAGAACTCACGCTAAATCTGAACGGGTGGCGCTAT
AATTTGTGACATCTGGCAAGATTTCCCTTTATGTATATATTTAACAATCCGCTTGGACACGACAAAGCCACAC
TTCTAATCTGCTTCTGGGCACTGATTTATTTTAAATTTTTTCAATAAAGATATTTCTAGATCTGAAAGAAAT
AGTTAATGAGTTTCATTTGTGCTTGAGAAAAATTTGGCTCAAGTCCATTGGCTGTAGTGTCAACGATGTTTCCA
GTAGTGTATTGATGTTGTGCTTCAAAAGGTAGTTGATTAAACCAAGGTGTCTTTAATATCTTTGATCAGAATA
ACTTTGTATGTTACCAACTTAAATGTAGAAATAAGGTAATGATACACAACCTGCTATTTTAAATTTAGAACCTT
TGACCTAATTTGGGTTTTCAAAACCATTTTGGCTACTGTGATTTCTTTATGCTGTGTTTATTTCAATAAAAAAT
CACACCT

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FIGURE 2075

ATGCGGTGCGGCTTTCGCCGCGCTATTGCTTGCCAGCTTTCAGAGTGTGAATCTTCCACCAGAAACTTGATC
ACATCAATATCTGCAGTTCCAATTTCCCAAAAAGAAGTAGCTGATTTTCAGCTTTCTGTGGATTCTTTATTG
GAAAAAGACAATGACCATTCAAGAACCAGATATTCAAGTTCAAGCCAAGAGACTAGCAGAGAAGCTAAGATGTGAT
ACAGTGGTGAGTGAAATCAGTACTGGTCAAAGGACTGTAAATTTCAAAATAAACAGAGAGCTCTTAACAAAGACA
GTGCTACAACAAGTAATGAAAGATGGCTCAAAATATGGATTAAAAAGTGAACTTTCTCTGGACTTCCCCAGAAG
AAGATTGTGGTTGAATTCAGTTCACTAATGTTGCCAAAAAATTCATGTTGGACATTTGCGTTCTACCATCAT
GGAAATTTTATAGCAAACTCTCAAAGAAGCTTTAGGACATCAAGTAATAAGAATAAATTACCTTGGCGATTGGGGC
ATGCAGTTTGGTCTTCTGGGAACCTGGCTTCCAGCTGTTTGGCTATGAGGAAAACTGCAGTCCAATCCTCTACAG
CATCTCTTTGAAGTTTATGTACAAGTTAATAAAGAAGCAGCAGATGATAAAGTGTAGCAAAAGCAGCACAGGAG
TTCTTCCAACGATTTGGAACCTGGGCGATGTGCAAGCACITTCACGTGGCCAAAAATTTCCGGGACTTGAGCATTGAA
GAGTACATTCGGGTTTACAAGCGCTCTGGGAGTATATTTTGATGAATATTCAAGGAAATCATTATCGTGAAAAA
TCTCAAGAGGTCTTAAAGTTGCTGGAGAGTAAAGGACTCCTACTGAGAACAATAAAGGAACGGCTGTAGTAGAT
CTCTCTGGGAATGGCGACCCCTCCTCAATTTGTACTGTAATGCGAAGTGATGGGACTTCTCTATGCAACCAGA
GATCTTGAGCTGCTATAGATCGAATGGACAAGTATAATTTGATACAATGATATATGTGACAGATAAAGGACAA
AAAAGCATTTTCAGCAAGTATTCCAAATGCTGAAGATCATGGGATATGACTGGGCAGAAAAGTGCCAGCACGTG
CCCTTTGGAGTAGTACAGGGAATGAAGACTCGAAGAGGAGATGTCACTTTCTGGAAAGATGTTTTAAATGAGATT
CAATTAAGGATGCTACAGAACATGGCTTCAATTAAGACAACATAAAGAACTCAAGAACCCACAAGAGACTGCAGAG
AGGGTCCGGGCTCGCAGCACTCATTATTCAGGACTTCAAAGGTTTACTCTTATCTGACTACAAGTTCAGCTGGGAT
CGTGTTTTCCAGAGTCGCGGGGACACAGGAGTCTTCTACAGTACACACAGCCCGCTCCACAGTTTGGAAAGAG
ACTTTTGGATGTGGGTACCTGAATGACTTCAACACTGCTTGTTTACAAGAGCCACAGTCTGTCTTCAATTTCTCAG
CATCTTTCAGGTTCCAGCAGGTTGCTTATAAATCATCTCAGGACTTCAACCCAGGCATATCGTCAGTTACCTT
CTAACTTTAAGTCATCTTGAGCTGTGGCACAAAACTACAAATAAAGATAGTCCTCCTGGAAGTGGCTGGG
GCCAGACTTCATCTTTTCAAAGCTGTCCGTTCTGTCTAGCCAATGGAATGAAATCTTCTGGAATAACACCTGTA
TGTAGGATGTAA

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FIGURE 2076

MACGFRAIACQLSRVLNLPENLITSISAVPISQKEEVADFQLSVDSLEKDNHDSRPDIQVQAKRLAEKLRCD
TVVSEISTGQRTVNFKINRELLTKTVLQQVIEDGSKYGLKSELFSGLPQKKIVVEFSSPNVAKKFHVGHRLRSTII
GNFIANLKEALGHQVIRINYLGDWGMQFGLLGTGFQLFGEELQSNPLQHLFEVYVQVNKEAADKSVAKAAQE
FFQRLELGDVQALSLWQKFRDLSIEEYIRVYKRLGVYFDEYSGESFYREKSQEVCLKLESKGLLLRTIKGTAVVD
LSGNGDPSSICTVMRSDGTSLYATRDAAAIDRMDKYNFDTMIYVTDKGQKKHFQQVFQMLKIMGYDWAERCQHV
PFGVVQGMKTRRGDVTFLLEDVLNEIQLRMLQNMASIKTTKELKNPQETAERVGLAALI IQDFKGLLLSDYKFSWD
RVFQSRGDTGVFLQYTHARLHSL EETFGCGYLNDFN TACLQEPQSVSILQHLRLRFEDEVLYKSSQDFQPRHIVSYL
LTLSHLA AVAHKTLQIKDSPPEVAGARLHLFKAVRSVLANGMKLLGITPVCRM

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FIGURE 2077

TTTTTTTTTTTTTTGTTCTGAATTATTTAAGTTTCTTATAGATTCTGGATATTAGACCTTTCTTAGATGCATA
GCTTATGAATATTTTCTCCATTATTTAGGTGTAGGGAAAGGAGAGCTTTTGATTTTTTTAAGCATTACAGA
TAATGTTGAAGTCACTGATATATATTTGTTGACTGCATTCCTACCCCTGCTTCCCTAGAGAGAACTGATCTCAT
GATGCAAAATGATTTATTTTCACGAATCAGTTGCTTTGTGTTTGTCTTTGTTTTGTATTTTTTTTCACCTAC
CCAGTGAAAAGGATAAATGGCATTGTCCATCTCTTTAATGAACACTAGTGTTAAGAAGAATATCTCTTTTT
CTCATGTTGAAACTCAAATTACAACATTTAAAAAATATGTCATTTGGAGGTGAGTGAGAGGTTTGAATTAGAAG
CATGTATTTGGAGTAGTAGAGGAAGCATTGTAGAAGAGGTAAAGAGACCTGGGCTTTTTCTCAGTCTGTTTTT
TTTGCAGTAGGATTTTAAAGGAGACATTAGCTTGGCAGACATCAGTTTTCATGTCTATAAAATAAGGTGGCTAG
TATAAGAGGAAGAATTTTTTGAGACTAGGTCTTGCTCTGTCCACCCAGACTGGAGTGCAGTGGCATGATCTCGGCT
CACTGCAACCTCTGCTCCTGGGTTCAGCAATTTCTCGTGCCTAAGCCTCCCGAGTAGCTGGGCTTACGGGCACA
TGCCACCACGCCCTGGCTAATTTTTGTATTTTGTAGTAGAGATGGGGTTTTTCCATGTTGGCCAGGCTGGTCTCAA
CTCCTGACCTTAAGTGGTCCACTTGCCTCGGCCCTCCCAAAGTGCTGGGATCTGTGCCAGACAGAAGAGGAAGAA
TTTTATAGATGATAAGAAAAACATTCTGAATAAACTAGGTTATTTCTCATTTTCTTGGCTTTTAAATTTTGT
TTTATTTATTTATTTATTTATTTACTTTTTTGAGACAGAGTTTCGCTCTTGTCAACCCAGGCTGGAGTGCAGTG
GCACAACTCTTGACTCGCTGCAGTCTCCACCTCCAGGATTCAGCGATTCCCTCGCTCAGTCTCCCAAGCAGCTG
GGATTGTAGGTACACACCACCATGCTGGCTAATTTTTGTGTGTGTGTGTATTTTGTAGAGATGGGGTTTT
ACCATGTGGCCAGGCTGGTCTAGAATCAACCTCAGGTGATCCGCTCGCTTAGCCTCCCAAAGTGCTGGGATTA
CAGGCATGAGCCACCGCTCTCGGCCCTTGGCTTTTAAATTTTGAAGTACACATAACACCTTCTCTGGTAAAGG
TATGTCTCAATGGAGAATCATAGTGATTAGTCTTTGTTTAAACAATAATGCTTTTAAAGTTAACAGTTCTATCTC
GTTTCGATGCTGTCTTTAGAGAAGTAGCTGATTTTCAGCTTCTGTGGATTCTTTATTTGAAAAAGACAAATGAC
CATTTCAAGACCAGATATTTCAAGTTCAAGCCAAAGAGACTAGCAGAGAAGGTACGTTAGCACTATTTATCTCTTTTG
ACATTGTAATAAACTTGTATTAAAAAAGTACTTTGCAGGCTATCTCAGCCATAATAGTGAATTTAATAGTGT
TCTTTGAGGCATCTTGTGTAATATAAATTTAAATTCATTTAGCCATGTACTATAAGGTTATAATGATTTTTTCAGA
TTAGTTATAAAGCACTCTCTTGAAGTACATTTGTTCAATTTTTGATTAAACCCTTACAGGAAGACTGAAGTGT
TAATTAATTTACAGATTGAAGCTGG